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In Memoriam.

GEORGE CARPENTER, M.D.LOND., M.R.C.P.

WITH very deep regret we record the death of our founder and editor, Dr. George Carpenter, which occurred suddenly on Easter Day, March the 27th, from cerebral hæmorrhage at the early age of fifty. His death came as a sudden shock to his many friends, some of whom have expressed their love and regard for him, and their appreciation of his work in connection with the study of disease in children, in letters to us. These we gladly publish, as they show better than anything else could the personality of the man. To the BRITISH JOURNAL OF CHILDREN'S DISEASES his sudden death is a great calamity. By his untiring energy, strengthened by his firm belief that thereby he could help on the study of that branch of medicine which was so dear to him, and by the assistance of many friends who shared his belief, he was able to bring into existence this JOURNAL, which is now in its seventh year of publication, and which, under his able editorship, has become fully established as truly representing pediatrics in this country. His loss is great indeed, but it is confidently believed that the JOURNAL which he founded will become more and more indispensable to those who are devoting their lives to the advancement of our knowledge of diseases in children.

Dr. George Carpenter was the eldest son of Dr. John William

Carpenter, and was educated at King's College School and Epsom College. He pursued his medical studies at St. Thomas's Hospital and at Guy's Hospital. At St. Thomas's Hospital he won the Third College Prize for 1880-1, and the First College Prize in 1881. As a second year's student he won the Third College Prize and the Prosector's Prize. He qualified as a member of the Royal College of Surgeons of England, and a Licentiate of the Society of Apothecaries in 1885, and took the degree of M.B. at the University of London in 1886, and that of M.D. in 1890. He became a member of the Royal College of Physicians in 1889. His first appointment at a children's hospital was that of Resident Medical Officer at the Evelina Hospital, where he also held the post of Medical Registrar, and finally became one of its physicians. He resigned this appointment on being elected Physician to the Queen's Hospital for Children, Bethnal Green, which post he held until the time of his death. He was also Physician to the North-Eastern Hospital for Sick Children.

Dr. Carpenter's work in connection with diseases in children is well known and highly appreciated. As far back as 1896 an attempt was made in this country to bring about a greater interest in the diseases of children by the publication of an Anglo-American Journal, entitled 'Pediatrics,' of which Carpenter was the English editor. This journal was supported by the literary contributions of Dr. Henry Ashby, Dr. Leonard Guthrie, Mr. Sydney Stephenson, Dr. G. A. Sutherland, Mr. Macleod Yearsley, Mr. Edmund Owen, Dr. John Thomson, Dr. Wayland Chaffey, Mr. Charles Morton, and others; but, as Dr. Carpenter wrote, "the psychological moment had not arrived, and the venture succumbed, as far as the English edition was concerned, in a comparatively short time."* It was after this failure that the BRITISH JOURNAL OF CHILDREN'S DISEASES was founded by him in 1904.

The Society for the Study of Disease in Children was founded in 1900, and was a success from its commencement. Dr. Carpenter took an active part in its formation, and was associated in this undertaking with the late Dr. A. Ernest Sansom, the late Dr. Henry Ashby, Mr. Alfred H. Tubby, Dr. David B. Lees, Dr. G. A. Sutherland, Mr. Sydney Stephenson, and Mr. Clement Lucas. He became secretary in the second year of its existence, holding this office for three years, and was president when the Society was incorporated in the Royal Society of Medicine in 1908. He edited the eight volumes of the 'Reports of The Society for the Study of Disease in

* 'Reports of The Society for the Study of Disease in Children,' vol. viii, p. xxix.

Children,' and in so doing he put in a great amount of strenuous work, for which he was amply rewarded by the enthusiasm with which they were received. These eight volumes contain 384 pages of ordinary matter, 2760 pages recording the scientific work of the Society, together with 209 illustrations in the text, 39 plates, and 12 coloured plates. The small volume, No. IX, containing 104 pages devoted to a general index to the whole series, rendered the work complete. The cost of printing and production amounted to about £1400. These volumes will remain as a lasting memorial to him.

Upon the Society being amalgamated with the Royal Society of Medicine, as the Section for the Study of Disease in Children, Dr. Carpenter was elected President of the Council, which post he held at the time of his death. His 'History of The Society for the Study of Disease in Children,' which appeared in Vol. VIII of the 'Reports,' is a very careful compilation, and of great interest to those who have observed the progress that the study of children's diseases has made during the last ten years.

Dr. Carpenter's work was well known in France, for he was a corresponding member of the Pediatric Society of France and a member of the French Ophthalmological Society, and to each of these he contributed scientific papers. His interest in ophthalmology was very keen, as is shown by his membership of the Ophthalmological Societies of the United Kingdom and of France.

Dr. Carpenter was the author of many important articles upon children's diseases, and perhaps the most noteworthy are those on congenital malformations of the heart. He published in 1894 a little book, entitled 'Congenital Affection of the Heart,' and the Wightman Lectures which he delivered last year were devoted to the same subject. In these he collected in a useful form a large amount of information, and dealt chiefly with the differential diagnosis of the malformations. These lectures were published in full in the August, September, and October numbers (1909) of this JOURNAL. He published in 1901 an instructive and well-written book on 'Congenital Syphilis in Children in Everyday Practice.' His other book, entitled 'Golden Rules for Diseases of Children,' entered a second edition. Most of his important contributions are to be found in the 'Reports of The Society for the Study of Disease in Children,' in the BRITISH JOURNAL OF CHILDREN'S DISEASES, and in the 'Lancet.'

Dr. George Carpenter married only two years ago Helen Jeanne, daughter of Henry, Baron d'Este, and every sympathy is felt with this lady in her great loss.

The Lancet, April the 9th, 1910 :

We regret to record the somewhat early death of Dr. George Carpenter, which occurred in London on Easter Day, whereby the medical profession has lost one of the most able and hard-working investigators of the diseases of children in this country.

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Dr. Carpenter was an indefatigable worker at all that concerned children's diseases, and contributed considerably to their literature. He founded and was the editor of the *BRITISH JOURNAL OF CHILDREN'S DISEASES*, and was chairman of the Council of The Society for the Study of Disease in Children and editor of its 'Reports' before its incorporation in the Royal Society of Medicine, when he became president of its Section for the Study of Disease in Children, to the proceedings of which he frequently contributed papers and cases. He was also a vice-president of the Society. He was the English editor of 'Pediatrics,' the American journal of children's diseases, and was a corresponding member of the Pediatric Society of Paris, while his interest in another branch of medicine was shown by his membership of the Ophthalmological Societies of the United Kingdom and of France. Whilst he took a general interest in the pathology of childhood, the study of congenital diseases of the heart occupied so much of his attention that he became an acknowledged authority in that field of study. In 1894 he published a book on the subject, the evident outcome of careful thought and arrangement of ideas, and his further experience on congenital cardiac affections was crystallised in the Wightman lectures delivered last year and published in abstract in our columns. Another careful compilation was his work on 'Congenital Syphilis of Children in Everyday Practice,' published in 1901. He was, moreover, a frequent contributor to the medical journals, and of his papers published in such a manner we may recall the following, which were printed in 'The Lancet': "The Differential Diagnosis of Abdominal Disease in Children"; "Tuberculosis of the Choroid"; an address on "Acute Pleurisy with Effusion"; on "Cases of Uncomplicated Myocarditis in Children"; "Lecture on Rearing of Children" (Institute of Hygiene, February, 1907); "A Fatal Case of Chorea associated with Double Optic Neuritis and Hyperpyrexia in a Child of 3½ years"; and "Congenital Hypertrophic Stenosis of the Pylorus and its Medical Treatment."

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The British Medical Journal, April the 9th, 1910 :

We regret to record the death, on Easter Sunday, of Dr. George Carpenter, of Welbeck Street and the Queen's Hospital, Hackney, in the fifty-first year of his age. It took place suddenly, and was due to cerebral hæmorrhage. He was the eldest son of the late Dr. William Carpenter, and received his general education at King's College School. His medical studies he pursued partly at St. Thomas's Hospital, partly at Guy's Hospital. He was Prosecutor at the Royal College of Surgeons, and in 1885 became M.R.C.S.Eng. and L.S.A. In the following year he graduated M.B. at the University of London. He received the M.D. degree four years later, and meantime had been admitted a member of the Royal College of Physicians. On his becoming qualified, chance first led him in the direction of lunacy work, but after holding for a time an appointment at a large asylum in the provinces he returned to London and joined the Evelina Hospital as Resident Medical Officer. Thus began his connection with the department of medicine to which his professional energies were afterwards almost entirely devoted. The Evelina Hospital he served in turn as Resident Medical Officer, Registrar, Chloroformist, and Physician, and at the time of his death was Physician to the Queen's Hospital, Hackney, an institution likewise occupied with the care of children. He also took considerable interest in ophthalmology. He was a frequent attendant at meetings of professional societies, among those to which he belonged and to whose publications he contributed being the Société de Pédiatrie at Paris and the Société Française d'Ophthalmologie, while in the affairs of the Society for the Study of Disease in Children he played a specially active part, serving it as Honorary Secretary for several years, and later as Chairman of Council and Editor of its 'Reports.' Of this Society in its present guise—a section of the Royal Society of Medicine—he was President at the time of death. In the course of his career Dr. Carpenter contributed largely to current literature ; he was also author of several books, nearly all his writings relating more or less exclusively to his favourite branch of medicine. His earliest paper dealt with the incubation period of German measles, and his last notable publication—The Wightman Lecture of 1909—with congenital heart disease. He was, too, the founder, as also the editor, of the *BRITISH JOURNAL OF CHILDREN'S DISEASES*, and at one time took part in editing an Anglo-American journal named 'Pediatrics.'

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From ROBERT EVAN ADLARD :

"It was my privilege to see much of Dr. George Carpenter during the past ten years—the period of his editorship of the 'Reports' and of this JOURNAL.

"The amount of energy he put into his work was amazing, and his thoroughness and care with regard to the smallest detail was admirable.

"From the piles of papers that bestrewed his desk he could always dig out anything he needed. Most people would have been bewildered by the unsorted mass. He had a system and method of his own which baffled an onlooker. Interruptions never seemed to disturb the train of his thought. He would pick up a dropped subject exactly where it had been broken and pursue it in the original strain, even after a long interval, without the least apparent effort. The telephone had no terrors for him.

"He loved criticism and to hear others' views. He was ever ready to give of his best and to receive with gratitude the smallest help from those who endeavoured to lighten his literary labours.

"Voracious as a worker he was equally strenuous at exercise. Until motor dust on the country roads caused him to give up in disgust the use of his favourite wire steed, long-distance cycling filled the greater part of his leisure time. As soon as he was restored to strength, after his severe illness of six years ago, he commenced to ride again. Among his longest one-day runs were those to Birmingham and from Bristol, when the meetings of the Children's Society were held in those cities; on the latter occasion he covered one hundred and fifty miles, dining at Dorking on his way home to Welbeck Street. Cycling done with, he devoted his attention more fully to photography, tramping with heavy camera from early morn to dewy eve. His portfolios testify to his skill and patience. The large collection of pictures that he made on holidays in Scotland and in Holland afford a wealth of pleasure. A great heart has passed away. His memory will live long with his friends."

Dr. JAMES BURNET writes :

"Dr. George Carpenter is dead. It is hard, very hard to realise the stern fact. His kindly heart has gone to its rest. No man was ever more sincere, more resolute of purpose, more generous in nature, more devoted to work, than he. His over-zeal was sometimes misunderstood by those who knew him least; by those who knew and loved him best it stimulated and made enthusiastic. His presence always served to cheer, his smile brought sunshine where-

ever it reached. A noble soul was his, broad-minded and free from that narrowness which is born of ignorance of the world and of self-sufficiency. None was more free from the selfishness of the bigot than Dr. Carpenter.

"The last time we saw him was on the occasion of his visit to the northern capital, when he presided over the provincial meeting of The Society for the Study of Disease in Children. He was chairman at the dinner in the evening, and charmed everyone present by his genial wit and rare, good-natured humour.

"And so he has passed away. No one but those who knew Dr. Carpenter intimately can fully understand what a loss his death has caused. It leaves a large gap in many a friendly heart which will not readily be filled up. Others may speak of his work and of his contributions to pediatric science, but we can only now refer to him as a friend, loyal and true under all circumstances. He was a giant among men, and yet undemonstrative, unassuming to a degree. His place is empty; the old familiar doorstep at 12, Welbeck Street will feel his tread no more, for the master has crossed the threshold for ever and entered into his everlasting rest. Noble heart, rest undisturbed till the shadows of the night have given place to the dawn of the great eternal morning."

Dr. EDMUND CAUTLEY writes :

"I made Dr. Carpenter's acquaintance in 1900 in connection with the formation of The Society for the Study of Disease in Children, and have been brought into intimate contact with him since that date. One of his greatest charms was his enthusiasm in the cause for which he lived, namely, the advancement of the study of children's ailments. For this no work and no trouble was too great. The generosity of his criticisms on those who in any way opposed his schemes was a striking and amiable feature in his character. Like most enthusiasts he was unable to realise that personal questions could sometimes enter into such opposition. What Carpenter thought beneficial for the Society and the advancement of his special line of practice he warmly advocated, never considering in the least whether it might or might not be to his own advantage. Another of his charms was the readiness with which he would assist his friends in their work, often refusing to accept the fee, although he had been put to considerable trouble and expense, if he thought his colleague wanted it more than he did. He was a warm-hearted, good-natured man, whose true worth could only be accurately gauged by those intimately brought into contact with him. Had he lived he would

undoubtedly have continued to add to our knowledge of medicine out of the wealth of material which he had accumulated. To medicine, and even more to his personal friends, his premature end is a great loss, and leaves a blank which will never be filled."

Dr. J. PORTER PARKINSON writes :

"I first made the acquaintance of Dr. George Carpenter when in 1900 The Society for the Study of Disease in Children was inaugurated. Though not one of the originators of this Society, he took from the first the greatest interest in it, and was one of its first Honorary Secretaries. When in 1903 Dr. George Carpenter was appointed to the post of Assistant Physician at the North-Eastern (now Queen's) Hospital for Children, I naturally became more closely associated with him. It was impossible not to recognise his whole-hearted devotion to his work, and the enthusiastic way in which he carried it out. Though keen on the scientific aspect of his cases, he never lost that sympathy and kindness which is never more appreciated than by the young; and the gentleness of his manner, despite a rugged exterior, I am sure won his way to many an infant heart. Straightforwardness was one of Dr. Carpenter's most obvious characteristics, and there was no one whose denunciation of double dealing was more emphatic.

"In Dr. Carpenter's unexpected death the Queen's Hospital for Children has lost a good friend and an able physician, whose work there will be long remembered, and there is no one who regrets the absence of his cheery presence and breezy personality more than myself.

"Others will write of the strenuous work done by Dr. Carpenter for the welfare of The Society for the Study of Disease in Children, of whose reports he was for eight years the Editor; for the *BRITISH JOURNAL OF CHILDREN'S DISEASES*, which he founded and edited during the past six years, and of the immense amount of literary and other work which he carried on in spite of uncertain health. I have only spoken of him as I knew him, and I feel I have lost a sincere friend and a valued colleague."

Mr. SYDNEY STEPHENSON writes :

"Gladly, and yet with sorrow, I accede to the request to pay a tribute to the memory of my dear friend, George Carpenter, whose death occurred with dramatic suddenness from cerebral hæmorrhage, on Easter Sunday, at his mother's residence at Waddon, Surrey, in his fifty-first year. The event was altogether unexpected. I had seen him but a day or two before, when he appeared to be in his

usual good spirits. But on March the 27th he complained of his legs, tried to rise, then fell backwards, exclaiming, 'It is cerebral hæmorrhage,' and after a brief period of unconsciousness, left the world the poorer by his loss. Thus died an accomplished physician, a competent writer, a most industrious man, and one of the most loyal men it has ever been my good fortune to know. He was buried amid beautiful surroundings at All Saints' Church, Sandhurst, Surrey, on March the 31st. I had the honour of officially representing the Council of the Section for the Study of Disease in Children of the Royal Society of Medicine at the funeral, and of placing a beautiful wreath sent by the Section upon poor George's grave.

"My acquaintance with George Carpenter dated from the days when we were boys together at Epsom College. For many years I had lost sight of him, and when I next came across him he was living in Welbeck Street, and was physician to the Evelina Hospital, where he had formerly been resident medical officer. From that day to this we have been in close touch. A week has seldom passed without our meeting. In 1900 the founding of The Society for the Study of Disease in Children brought us into closer contact than ever. Carpenter's enthusiasm was one of the many bright points attending the inauguration of that useful and successful Society. A small group of men, some of whom, including Carpenter, have, alas! since joined the majority, were among the leading spirits. A. Ernest Sansom and Henry Ashby have left us; but Alfred H. Tubby, David B. Lees, George A. Sutherland, Clement Lucas, and some others are still with us. Carpenter took from the first a prominent part in the management of the Society, became secretary in the second year of its existence, and edited the eight volumes of 'Reports,' which were published until amalgamation with the Royal Society of Medicine in the year 1908. Those eight volumes, crammed as they were with valuable material, represented a vast amount of work on Carpenter's part, and I think he was prouder of them than of anything else he had accomplished in the course of his strenuous life. They form, indeed, a worthy monument to his industry.

"Carpenter's was, indeed, a complex character. Sensitive to a degree, he sometimes imagined a slight where none was intended. He was literally one of those men who 'wear their heart upon their sleeves for jays to peck at.' But if quick to resent, he was equally quick to forgive. One pleasant word and he was at any man's call. His intense loyalty to friends was a striking feature of his

character. He possessed a homely mother-wit, which he could employ on occasions with telling effect, and he had the British quality of being able to speak out his mind when necessary. Quick, tempestuous, and yet withal of a most affectionate and charitable disposition, George Carpenter will be sadly missed by friends and patients alike, many of whom, including myself, owe more to his skill and loving-kindness than they can ever hope to repay. May his loyal and tender soul rest in peace! Good-bye, dear George Carpenter."

Mr. ALFRED H. TUBBY writes:

"Very many mourn the loss of Dr. George Carpenter at the comparatively early age of 50 years, in the fulness of his activities and in the maturity of his powers. When the Sub-Editors of this JOURNAL asked me, amongst other friends, to contribute a few notes of personal recollections, I felt myself highly privileged to accede to their request.

"George Carpenter and I came closely into contact when I was elected, in 1893, to the staff of the Evelina Hospital for Children, of which he was then a member. I had known him previously, but slightly, when he was at Guy's, and at the time he was Medical Registrar at the Evelina. I was much attracted by his breezy and genial personality, and the more intimate contact of colleagueship proved a great source of pleasure to me.

"He was one of the finest clinicians of his day, and he possessed, what is not always the case, a thorough knowledge of physical and clinical signs. As he used to say, 'There are your physical signs, and you cannot go wrong in your diagnosis.' The pains he took in, and the care he bestowed upon, the examination of his patients were, I venture to think, almost unparalleled. At no time was he content merely to examine the apparent site of the disease, but whenever circumstances permitted he would have the child stripped and go systematically into every detail, so that he always treated 'patients' and not cases. We cannot recall a single instance of a patient under his care in whom a lesion had been overlooked by him, and was discovered subsequently by another observer. In addition to an infinite capacity for taking pains, he was gifted with clinical insight and a logical habit of mind. It necessarily followed that he gradually built up for himself a reputation second to none in that special branch of medicine, the diseases of children. Happily he was one of those very thorough people who take copious notes of observations and impressions of a patient at the time. It is to be hoped

that they may be published, as they constitute a mine of clinical information and it would be a great pity for them to be lost. I venture to think that a small volume containing a selection of notes from his case-books will prove to be that form of memorial which he would most have desired.

“As a colleague George Carpenter was ever loyal and true. He expressed his views with a frankness and outspokenness, which were always accompanied by the saving grace of humour, and he endeavoured to secure an unanimous expression of opinion from his medical colleagues on all occasions.

“It was especially as a writer that he shone. His style was clear and concise, the English he wrote graphic and accurate, happy in simile, and apposite in illustration. The obituary notices of his friends A. E. Sansom and Henry Ashby are perhaps the best examples of his power of delineating in a few sentences the character and the appearance of a man and of conveying to his readers a striking impression of a personality. We quote two examples, one referring to A. E. Sansom and the other to Henry Ashby. Of the former, Carpenter said: ‘Sansom not only wrote about hearts medically, he was himself a man of heart, and he won hearts. . . . Neat and quiet in his attire, gentle-mannered and of frail-looking physique, he literally brimmed over with geniality and goodness of heart.’ Of the latter he wrote: ‘A man of strong personality—fine Henry Ashby; not only was he fine in intellect, but fine in physique, for he stood over six feet in his stockings and was broad in proportion. No ‘stove-pipe’ hat encircled his brow, or frock-coat—the modern conventional doctor’s get up—marred his comfort. . . . No tight boots imprisoned his strong feet; a simple crucial incision by his own hand through the leather of his boot over a bunion displayed his common-sense methods and his total disregard for the puerile criticism of his neighbours. . . . His sympathy with children and his exquisite gentleness in handling them, enabled him to make with care the thorough examination which was his invariable custom.’

“George Carpenter made many contributions to medical journals, and they were stamped by an originality the outcome of a vast clinical experience. He wrote a small volume on ‘Syphilis in Children’ and another on ‘Congenital Affections of the Heart,’ and he chose the latter subject as the theme of his Wightman Lecture. It was felt by many that he was one of the few men who could write an authoritative and systematic treatise on the medical diseases of childhood, and we know that on two occasions he commenced to

do so. But the magnitude of the work and the calls upon his time prevented him carrying out his intentions, greatly to the regret of his friends and colleagues.

“For the last eight years of his life he devoted all the energy he could spare from routine work to the welfare of the newly founded Society for the Study of Disease in Children. Almost one of the founders, and certainly amongst its earliest members, his interest in it never flagged. He threw himself into its work from the very commencement with greatest zeal, and rendered it yeoman service. To him no small measure of its rapid success was due. He succeeded Mr. Sydney Stephenson as Hon. Secretary, and subsequently was elected Chairman of Council. Upon him largely fell the responsibility of conducting the negotiations for the amalgamation of the Society with the Royal Society of Medicine. At the time of his death he was still in office. For eight years he edited the ‘Reports of The Society for the Study of Disease in Children,’ and they will by their excellence constitute a lasting monument to him. He was a most regular attendant at the Society, and always made a point of being at the country meetings, where his social qualities rendered him most welcome. Many country members were, to our knowledge, induced to join the Society by his persuasive eloquence. In my recollection, two meetings, to the success of which Carpenter largely contributed, stand pre-eminent, those at Liverpool and Edinburgh. As the founder and editor of this JOURNAL he did a great deal to stimulate and sustain the interest in that branch of medical work which he had so much at heart. *

“In personal appearance he was short, broad, and thick-set, with a face and head expressive of intellectual power, while the eyes behind the gold spectacles twinkled with humour. His hair stood upright, and he had a curious and striking habit of running his fingers through it whenever he was interested or profoundly moved. Full of fun, he was an excellent *raconteur* and cheery to a degree. Though not generally fluent in speech, yet when carried away by a subject, such as the welfare of The Society for the Study of Disease in Children, he became almost an orator.

“My own recollections of him are very vivid. He was keen on sport, and for some years shared a most excellent shooting in Suffolk with some friends. It was my privilege to be invited, and I was much impressed by his skill. Despite the facts that he was astigmatic and hypermetropic, and that his left eye was his master-eye, he showed himself to be a very good shot with a specially fitted cross-stock gun. We remember seeing him take his

stand in a drive and bring down rocketting pheasants in great style. When he was laid low by a serious illness six years ago I was attending him. Calling upon him one day, I found him in bed, very weak, but convalescent, engaged in polishing the locks of his guns. It was during the shooting season, and he told me that if he could not shoot he could at least look at his guns and see that they were all in order. The one particular in which his memory will be dear to many is the loyalty of his friendship. It was stamped by a thoroughness and a chivalry which are all too rare. His friends knew him as 'George,' and perhaps the most striking proof of the esteem and respect in which they held him was the value they placed upon his opinion in the time of illness and the eagerness with which they sought his advice and help both for themselves and their families. He invariably gained the confidence and affection of children, and placed them at their ease with some jocular remark or by displaying an interest in what they were doing. He had a profound knowledge of the psychology of childhood, and knew exactly how to deal with children. When Carpenter paid you a professional visit there was nothing perfunctory about it. He would often stay, despite the fulness of his day and the calls upon his time, and chat for an hour or more, pouring out racy anecdotes, and leaving his patient in a hopeful and happy frame of mind. It was this way of his which perhaps more than any other endeared him to his friends. He was ever ready to come at any hour of the day or night at personal inconvenience. The last time we met was at the Post-Graduate College just as he was about to deliver a lecture, and I remarked to him, 'Well, George, it is a long time since I have seen you, but I expect you have been very busy.' 'Ah,' he said, 'but am I not on your doorstep whenever you want me?' At that time the effects of the incessant strain of work were becoming very noticeable in him. The serious illness of six years ago left a deep mark, and he never seemed to recover thoroughly. The brightness and vivacity were there, but they evidently required an effort on his part. In many directions he was a man of great will-power, and the steadfast way in which he set himself to overcome the effects of his illness was most striking. Previously to it he had been a great smoker, but, because he thought it harmful, he cut himself off tobacco absolutely, and was able to see his friends smoke with apparent equanimity. He has, however, told me sometimes of the effort it cost him to deny himself the solace of the 'weed.'

"The death of George Carpenter leaves in the medical world and

the hearts of his friends a gap which cannot be filled. His reputation has been justly described as world-wide. It is our profound regret that, being thus untimely cut off, he had not the opportunity of reaping the rewards of those who labour. His friends, while they deplore his loss, will retain bright and happy memories of him. He himself, all unwittingly and all too recently, wrote his own panegyric: 'And disciples of the art of healing in the future will gather that we, too, had our trials as well as our triumphs. They will understand that, once living men like themselves, we too have passed across the world's stage, and that though our bodies are dust, our spirits will speak to them . . . encouraging them to persevere and not to be daunted when the cause is noble, and to regard opposition and difficulties of research as a stimulus to increased effort.' "

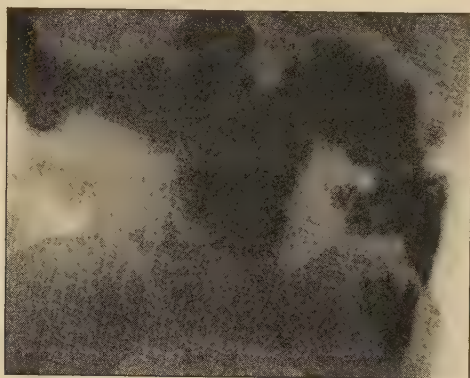
Original Articles.

X-RAY PHOTOGRAPHS FROM A BOY, AGED THREE YEARS, THE SUBJECT OF HABITUAL CONSTIPATION.

By E. I. SPRIGGS, M.D. and H. F. L. HUGO, M.B.

THE boy has been constipated since birth, the bowels being only opened with injections, except for a few periods of diarrhœa, which have occurred about every six months. He has vomited occasionally, especially after purgatives have been given in vain. His appetite has been poor. A sister, aged 7 months, is also constipated, and a brother died at the age of 10 months of diarrhœa, after some trouble with the bowels. Neither parent is subject to constipation. In the hospital, syrup of senna, cascara sagrada, magnesium sulphate, and liquorice powder were ineffectual; an enema usually produced a result. Nothing abnormal was found on examination of the abdomen and the rectum. The photographs (by Mr. Hugo) show the bismuth (given with bread and milk) in the small intestines and cæcum in six hours; in the ascending colon and the whole of the transverse colon in twelve hours (Fig. 1); the descending colon in eighteen hours (Fig. 2); the hepatic flexure, transverse colon, and sigmoid in thirty hours; the descending colon and sigmoid in forty-two hours (Fig. 3); the sigmoid entirely in fifty-four hours. The bowels were

not opened during the observations. Comparing these times with those given by Dr. Hertz, it appears that the delay in the passage

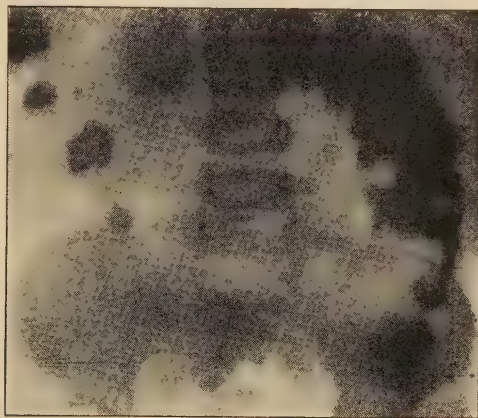


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FIG. 1.—After twelve hours.

of pure residue took place almost entirely in the descending colon and the sigmoid flexure, probably chiefly the latter. Most of the colon was traversed in a normal time. After the photographs were



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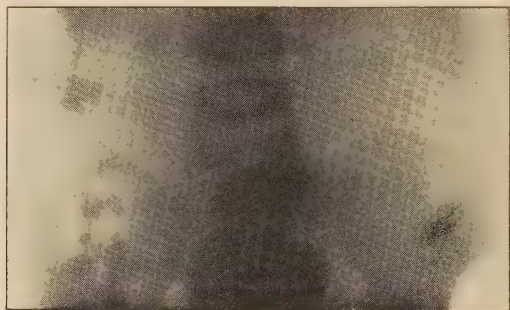
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FIG. 2.—After eighteen hours.

taken he was given a diet of wholemeal bread, porridge, treacle, fruit, butter, dripping, greens, potatoes, meat, and fish, with plenty of fluid. For the first three days of this diet enemas were used, on the fourth the bowels were open naturally, and on the three

succeeding days of his stay in hospital, which was brought to an end by the occurrence of infectious disease.

It is generally held that a "stimulating" and bulky diet should be prescribed when constipation is due to delay in the passage of food residues through the cæcum and the ascending and trans-



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FIG. 3.—After forty-two hours.

verse colon, but that when it is due to delay in the sigmoid flexure, owing to the sigmoid or rectal reflex not having been acquired, or having been lost, that dietetic treatment is not indicated.

The result of treatment in this case shows that a suitable diet is also of advantage in those cases of constipation in which food passes through the small intestine and the major part of the large intestine at a proper rate.

SOME THOUGHTS ON THE CONTROL OF ZYMOTIC ENTERITIS.

By JOHN ALLAN, M.D., D.P.H.

(*Concluded from p. 123.*)

WITH some knowledge regarding the ætiology one is able to understand in what directions preventive measures can best be applied. In my opinion the problem is not one that should be dealt with by the public health authorities only. Much might be done and should be done by general practitioners and by the medical staffs of children's hospitals, and these gentlemen should co-operate with the medical officer of health of the district with a view to lessening the prevalence of, or even of stamping out, this disease.

There are certain definite directions in which we may endeavour to deal with the problem, and the difficulty is to allocate to any one measure the chief importance. In view of recent research the premier place should, I think, be given to the fly question. Every endeavour should be made to prevent fly contamination of food. A relentless war should be waged on these pests with a view to diminishing their numbers. Dr. Glover, in his paper already referred to, has rightly pointed out that the fly has undoubtedly a certain utility in nature, and that it is not consistent with the welfare of the community that we should work for the total abolition of this insect. All food should be carefully protected from flies. Milk should not be kept in uncovered jugs; sugar, butter, etc., should not be allowed to lie all day on the table, and all articles of diet should be stored in some place to which flies have not access. In older houses the larder is often built in most unsuitable situations, and in the building of new houses it is to be hoped that attention will be given to the scientific construction of this important apartment. Nash (16) believes that the larder should be a separate room, preferably of northern aspect, with a window opening to the external air. The window should be protected from flies by wire gauze. The old-fashioned meat-safe, placed in the open air, and found in many older houses, is to be preferred to a larder within the house. Nash, in his article in the 'Journal of Hygiene,' expresses the hope that it will soon be made illegal to have fly-breeding accumulations within a certain prescribed distance of any dwelling-house. As for brickfields or other places where decaying or organic matter is deposited in quantity, such businesses should be under strict regulations as to such deposits, and they should be far removed from inhabited houses. He discusses how this might be hygienically and economically accomplished. There is certainly much to be said in favour of these recommendations, and it is to be hoped that legislative measures to deal with them will be brought before Parliament. The sanitation of streets should receive attention. The flushing of streets with water to lay the dust is important, and in towns where this is practised much benefit to the health of the community has resulted.

Education of the public is very important. This can be effected in various ways. With the adoption of the Notification of Births Act, 1907, by a local authority, one or more lady health visitors are appointed, and these ladies in the course of their visitations can distribute much valuable knowledge, especially with regard to the feeding and hygiene of infants. They may also be instrumental in bringing to the notice of the health officials the presence of

insanitary conditions in the house. Much more can be done by this means than by the distribution of printed leaflets, although this latter method must not be neglected. The matter in these leaflets should be expressed as succinctly and in as simple language as possible, otherwise the leaflets will probably never be read. It might be of advantage to issue the information in a more attractive manner and in a form that would be more likely to command attention. A hint might be taken from the vendors of patent proprietary medicines, as some of the success in pushing the sales of such must be attributed to the way in which the attention of the public is solicited. The hints regarding the prevention of summer diarrhoea might be given in a little book containing pictures of the chief places of interest in the district, with brief notes regarding such; or in a small pamphlet containing portraits with short character sketches of eminent workers in various spheres of life, and so on. The more ingenious and striking the production the greater the likelihood of its being read. Pictorial cards have been used in some places for distributing knowledge regarding consumption. Why not also employ them in this disease? An excellent plan is in vogue in St. Helens, where information regarding the feeding of infants is given on a 'Baby Calendar.' This calendar is sent to every woman on the birth of a child. The instructions are simply and clearly put, and the calendar is not only useful, but is also ornamental, the pictorial illustration being quite artistic. Dr. John Buchan, the medical officer of health, is sceptical of the value of printed matter unless it be of a striking character, although he does not think that this medium of distributing knowledge should be neglected.

These leaflets should be distributed not only by public health officials, but also by medical men in general practice and by the staff at children's hospitals. District nurses, midwives, lady health visitors, and ladies engaged in charitable work might also assist in distributing such printed matter. The information, whether conveyed by leaflet or whether given verbally by the lady health visitor or other official, will cover certain definite ground. The chief points will relate to the danger of flies and to the importance of the hygienic care of infants. In view of the importance of flies as carriers of disease, suggested by recent research, some pointed remarks regarding the danger accruing to this pest might be made the subject of a brief opening homily. Attention should be drawn to the fact that during the warm months in summer and autumn the fly may breed in all places where filth accumulates, such as stable manure, excre-

ment of the privy, and decaying garbage in the ash-pit and back-yard; that the fly finds in these choice collections of decomposing filth nourishment to sustain life; that the fly is capable of carrying away on its legs and body some of this filth, and may likewise carry the germs of diseases; that the fly, coming from such places, may alight on food which thus may become contaminated. Then indications as to the best means of controlling the evil may be given. Householders should be advised to make use of fly-papers, etc., to catch the flies, to carefully protect all food, and especially milk, from the risk of contamination by flies, not to throw animal and vegetable refuse into their back yards, or put it into uncovered ash-bins or ash-pits, to prevent their children defæcating in the courts and alleys, and to remove any excreta at once, to see that drains, sinks, gullies, etc., do not become choked, and to frequently flush these with warm water to prevent nuisance, to keep their houses and outdoor premises clean, and so on. Dr. Hamer's (20) investigations would seem to indicate that windows should be kept closed, which, I think, is most unfortunate, as the close, stifling atmosphere thus produced in small houses cannot be good for the health of the infant. Dr. Glover (19), advises that when flies are numerous turpentine should be sprinkled on some dry cinders. Then instructions as to the feeding of infants should be included. It should be pointed out that breast-feeding is the ideal method for infants; that even if the mother cannot give the infant sufficient nourishment from the breast, it is much better to give the breast and bottle alternately than to rear the infant on the bottle only; and that the baby should not be weaned during the warm weather in summer and autumn. If feeding by hand is the only means available, then careful directions as to the preparation of the food should be given. It should be strongly urged that cow's milk suitably diluted according to the age of the infant is the best substitute for mother's milk, and the mother should be warned against the use of condensed milk and various patent foods. At the present time it is wise to advise that the milk should be boiled before being used. In view of the gross ignorance among a certain class as to infant-feeding, it is necessary to point out that no solid food, especially fried fish, fruit, etc., should be given to young infants. The baby should not have "just a taste of anything that is going." Advice as to the scrupulous cleanliness of bottles should be tendered. Only boat-shaped bottles with short nipples should be employed. The use of bottles with long tubes should be prohibited. I understand that in some places on the Continent the sale of these bottles is prohibited by law, a plan which might be

with advantage copied in our country. The long-tube bottle is a veritable death-trap, as it is most difficult to keep the tube clean, and if not clean it may contain millions of putrefactive organisms. It is of advantage to have two boat-shaped bottles in use and to employ them alternately. The bottle should be carefully cleansed after each meal, and the nipple should be turned inside-out and thoroughly scalded. Any milk left over should be rejected. The sale of that abomination the "dummy-teat" should be prohibited. It is liable to collect all sorts of filth, and is quite unnecessary for the successful rearing of children. The fly seems to relish the "dummy-teat" when moistened with saliva and milk, and if it is afterwards placed in the infant's mouth without its having been cleaned, then disastrous results may supervene.

Mothers should be advised to take the child into the open air as much as possible during the warm weather, and should be warned not to overclothe the child. To prevent the infant from flies when it is in the open air Dr. Glover advises the use of a meshed muslin cover over the face, especially when the child is asleep. Ostheiner (27), regarding summer diarrhœa in infants as due primarily to two causes—unclean food and heat—recommends, among other things, that in summer the infants should be bathed frequently and excess of clothing guarded against, and that they should be kept in the open air in the shade as much as possible.

It should be strongly urged that no case of diarrhœa during the summer should be neglected. Kerley (28) has shown that a useful prophylactic measure is the early recognition and prompt treatment of cases of epidemic diarrhœa—an important point that is frequently overlooked by parents and doctors. If an infant in the warm season has slight sickness and diarrhœa, and especially if the stools be green, medical advice should be sought without delay, and pending the arrival of the doctor the mother should give the infant nothing but boiled water which has been allowed to cool, and should on no account give the infant milk; or perhaps to avoid wounding the tender sensibilities of any who might view with alarm this starvation treatment, and who fail to realise that it is the very best thing for the infant in the majority of cases, it might be better to advise the administration of albumin-water in lieu of milk.

A case of zymotic enteritis having occurred in a house, the person in charge of the child should be instructed to take precautions to prevent any possibility of secondary cases. She should be warned not to leave soiled diapers lying about, but to place them in boiling water or some disinfectant, and always to carefully cleanse

her hands before preparing any food. Holt (29), referring to the proved contagiousness of dysenteric infection in infants, says that most probably infection occurs from the faeces, and therefore the stools should be disinfected and great care should be taken to prevent contamination of food or water by persons handling the child's napkins. Some local authorities are so convinced about this very likely source of infection that they offer to supply householders with disinfectant if they cannot afford to buy it. The disinfectant might also be used for pouring down drains, traps, etc., or for pouring over any small local accumulations which appear to be infested by flies, it, of course, being understood that such accumulations should be removed at the earliest possible moment.

The information in amplified form, such as given above, is best conveyed verbally. In printed form it has to be more concise, and at the end of my paper I give a sample of leaflet which I should suggest as suitable for distribution in connection with this disease. The more important points should be printed in large type and underlined, or may be printed in coloured type. A separate pamphlet on "The Care and Management of Infants," and containing fuller information regarding the feeding, clothing, and general hygiene of infants, is, as a rule, also issued.

Education by popular lectures, and the teaching of senior girls in all schools in matters relating especially to infant hygiene must not be forgotten. The instruction of these older school-girls must be considered all the more urgent when one recollects that on leaving school they are, in many instances, given the charge of their baby brothers or sisters and, perhaps, of some poor little infant who has been "farmed out." It has also to be remembered that in crowded districts where zymotic enteritis is so prevalent, many of these girls undertake the duties of maternity at an early age. In connection with "farmed out" infants, I should like to say that the laws relating to such should be rigidly enforced. Under the Infant Life Protection Act of 1897, there were certain regulations drawn up with a view to the protection of these unfortunate infants, but in many districts the Act was practically a dead letter. Under the Children's Act of 1908 some of the regulations have been made more stringent, and it is to be hoped that those in authority will faithfully carry out the duties imposed on them, and that they will not only see that the regulations are well maintained in their district, but that they will also punish severely those who actively or passively countenance any infringement of the Act. A considerable percentage of these "farmed out" infants are the infants of women employed in factories.

A woman who works in a factory is forbidden to return to her employment for a month after parturition. This period is far too short. It is a direct incentive for the woman to rear the baby on the bottle, for if she purposes to return to work in a month's time she naturally does not think it worth while to suckle her child for a month. If the time were extended to three months (or better, six months), far more of the women would nurse their infants at the breast, and not only would the infants be better protected during these early months of life, but their chances of resistance at a later period would be enhanced. The number of lady inspectors appointed under the Factory and Workshops Act is too small, and however energetic these ladies may be in carrying out their duties, there cannot be adequate control of women workers in factories at the present time. It would also be of advantage if a month or two of rest from work in factories prior to confinement were enforced by law.

There should be rigid supervision of the milk traffic. It is probably true that the milk becomes contaminated in the house in many instances, but it is also true that greater care might be exercised in its collection and distribution. Milk as secreted by the healthy animal is sterile, and it is due entirely to carelessness that contamination takes place. It is impossible to give in detail the various ways by which contamination might be prevented, and I shall merely state in general terms that by the better housing and care of animals, by hygienic milking and subsequent storing of the milk, and by greater care in transit, a pure bacteria-free * milk could be delivered to householders. The precautions necessary to prevent contamination in the house have been already indicated. I am sufficiently optimistic to believe that such is quite within practical politics, and that by education and legislation this ideal could be accomplished. I cannot enter into a discussion on the pros and cons of the various methods for minimising the risk of contaminated milk, but it must be admitted that at the present time some devices of this nature are regrettable necessities. I indicated above that in summer milk could only be safely used for infants after being boiled, so great was the probability of contamination having occurred. I may also say that I consider pasteurised milk objectionable for the reason that it gives to many careless persons a sense of false security. They believe that if the milk has been so treated

* This, of course, only refers to freedom from harmful and dangerous bacteria. It does not imply absence from the milk of such bacilli as lactic acid, enzyme-forming, etc., which are normally present.

it will keep fresh for some days. Pasteurisation kills the lactic acid bacilli, but not spore-bearing organisms. These develop, and in twenty-four hours the milk may be swarming with millions of dangerous organisms, although the milk appears quite fresh and has no putrefactive odour. Any of the milk not used up in twenty-four hours should be rejected. Dr. George F. Still (30) some years ago expressed the opinion that in dirty crowded tenements, with little possibility of proper storage, and of less intelligent care, condensed milk is preferable to cow's milk during the summer months when diarrhœa is prevalent. I, however, agree with Dr. Nash (6) in the criticism which he offers, viz. that such can only hold good (1) provided that the contents of the tin are used up directly, (2) that flies are not numerous in the house, or (3) that if flies are numerous, the condensed milk is properly protected from them. An attempt has been made to show that the use of dried milk may be an excellent prophylactic against zymotic enteritis. Dr. Minett (31) a year or two ago investigated the matter and chronicled favourable results, but the number of cases was too small to justify too definite conclusions. Dr. C. K. Millard (32), medical officer of health for Leicester, has recently enthusiastically extolled the virtues of dried milk as a food for infants, not, however, especially in relation to summer diarrhœa. It seems to me that a pure and sterile product might thus be got. The following quotation from a recent able paper on "Milk Supplies for Large Towns," by Dr. John Robertson (33), medical officer of health for Birmingham, is very significant: "In the city of Birmingham and in Sheffield practically the whole of the deaths from infants from summer diarrhœa occur among that half of the population living in the smallest dwelling houses. In Birmingham this is very marked from year to year. We have one half of the population practically without a single death, while among the other half during the hot summers a thousand or more deaths occur. To a very large extent the same milk supply goes to both groups of houses, so that, practically speaking, it is the careful handling and storing of the milk in the dwelling-house which prevents these deaths in the better class of dwellings." Dr. Robertson also thinks that every encouragement and support should be given to those purveyors of milk who endeavour to supply clean, pure milk, and the others would soon have to come into line. There is not the slightest doubt that there is room for much improvement in various aspects of the milk traffic. I should like to see an extensive trial given to feeding infants in one of our crowded cities with pure uncontaminated and natural milk, which in my opinion is the

best substitute for breast-feeding. I am certain there would then be a diminution of summer diarrhœa.

Again, any measures that aim at securing greater cleanliness and better sanitary conditions in the homes and surroundings of the people would do much in preventing epidemic diarrhœa. Privies and tub-closets should be abolished. If that is absolutely impossible then these should be as far as convenient from the house, and should be well away from any place where food is stored. Every effort should be made to keep them in good order, and precautions taken to prevent flies entering and leaving them. The satisfactory results that have followed the introduction of the water-carriage system of sewage disposal in many places is sufficient justification for advising its universal adoption. Large ash-pits should be prohibited. If these were kept for the reception of ashes only there could be little objection to them, but when one remembers that animal and vegetable refuse are thrown into them and that they may only be emptied at long intervals, it is easily understood that they may create considerable nuisance and may attract flies. Small, movable ash-bins with tight-fitting lids, which should be emptied daily, are much to be preferred. There is really no necessity for decomposing refuse to be placed in them. That should all be burnt, and by so doing householders might economise in their fuel. The backyards of houses should be paved with impervious material, and in hot, dry weather they should be frequently flushed. Overcrowding should be prevented and hopelessly insanitary buildings should be pulled down. In general, anything which tends towards better sanitation will assist us in our efforts to cope with zymotic enteritis.

As a very important weapon for the control of epidemic diarrhœa, I should advise that the disease be added to the list of notifiable diseases. I am well aware that such a suggestion is likely to raise a great outcry, and would probably be met with vigorous opposition, but I am convinced that much good would follow if this recommendation were adopted. So far as I know any such course has been tried in one place only, namely, Woolwich, where modified voluntary notification has been in vogue since 1905, and in an interesting report issued in 1909, Dr. Sidney Davies (34), the medical officer of health, relates his experiences. Notification was voluntary, and was only for the three summer months. During the four years 844 notifications were received, but Dr. Davies believes that only about half the cases were notified. On analysis of the cases several important points are made out. The comparative immunity of breast-fed infants is strikingly demonstrated, and babies reared on

depôt milk compared favourably with those fed by hand or other milk, though the numbers were too small to lay much stress on this fact. About 50 per cent. of the infants were weaned before the proper time. Some of the facts suggested personal infection in the family, and there was also evidence pointing to the spread of the disease from one house to another. Dr. Davies shows that, while in the years 1901-1904 the diarrhœal death-rate in Woolwich was higher than that in London, in the four years when there was voluntary notification the mortality-rate was markedly lower in his district. Though he does not claim for notification alone this satisfactory result, he believes that it has played an important part in reducing the death-rate. He advises that notification be continued, and that the time be extended to include the period June to October.

I should like to see this experiment tried in many large towns and cities, but I would go further and suggest that the notification should be compulsory. Voluntary notification, though better than no notification at all, is only a half measure. It depends entirely for its success on the willing and cordial co-operation of the practitioners in the district, and it requires an enthusiastic medical officer of health of dominating personality to carry it out efficiently.

I do not advocate the disease being made notifiable because it is infectious, in the same sense that diphtheria, let us say, is infectious, but because, by the knowledge so obtained, the medical officer of health would be able to exercise better control. At the present time he has only the knowledge of the cases which have been certified as having died from diarrhœal diseases, and by the time these returns reach his office the most effective period of control has passed. It has to be remembered that those who succumb constitute only a small proportion of those who are attacked, and one must also recollect that an attack of zymotic enteritis, though not fatal, may so cripple the infant that in the future he or she is more prone to develop other diseases—in other words, the indirect effects are of grave import. What advantages, it may be asked, would be likely to accrue to notification? In the first place the medical officer of health would obtain early knowledge of the distribution of the disease, and if any suspicious grouping were apparent, minute investigations could be instituted with a view to ascertaining the probable cause, *e. g.* fly-breeding places in the neighbourhood. The medical officer of health would also become cognisant of first cases, and by putting the necessary machinery in motion he might be able to reduce the number attacked, for I feel sure that some of the cases

in the immediate neighbourhood are secondary ones. I think it would also be an excellent plan if in the crowded dwellings in the slums, where from carelessness or ignorance proper precautions could not, or would not, be adopted, these first cases were received and treated in hospital. Then the epidemiological officer, when making his inquiries, would be able to note if there were any sanitary defects in the house or adjoining premises. Again, advice could be tendered as to suitable precautions to be taken to prevent its spread, and educative leaflets left at the house. There does not seem to be any call for disinfection of the rooms as in the other infectious diseases, but, as hinted above, the person in charge of the infant should be warned not to allow soiled diapers to lie about, and after removing the napkin to carefully wash her hands before preparing any food. The sanitary authorities might have brought to their notice necessitous cases, and might be able, through the medium of some charitable agency, to afford temporary assistance.

The notification I advise is chiefly for the purpose of gaining better control over the working class or unemployed population, among whose babies the disease is much more prevalent. Perhaps the chief objection put forward would be the expense necessary for the efficient working. Money would be required to pay for the notifications received, and most likely another inspector would have to be appointed, but it seems to me that the saving of life should be adequate recompense for any extra trouble and expense. Objection to notification on the ground of uncertainty of diagnosis could not be seriously put forward because a typical case of zymotic enteritis presents no difficulty of diagnosis. It might be argued that the infective character of the disease is not definitely established, that ordinary preventive measures are not required as in the other infectious diseases, and that it would be a mistake to class it with the other notifiable diseases, but I do not admit that these are strong points against notification. It might be objected that there would be interference with the medical attendant and friction might arise. I should not propose that the public health authorities interfere in any case where a medical man is in attendance, and where intimation is given that assistance is not desired. I am confident, however, that medical practitioners themselves would cordially welcome any assistance from the medical officer of health, and would heartily co-operate in any efforts to deal with this scourge of infant life.

Such, then, are some of the methods by which epidemic diarrhoea might be prevented, and I venture to say that they are far more

important than the actual dietetic or drug treatment employed in the disease. It may be that the disease will never be entirely abolished, certainly not for many years to come, but I am convinced that by preventive measures the lives of many thousands of infants might be saved, and in view of our steadily decreasing birth-rate this merits close consideration. It is not a matter for congratulation to note that the diarrhœal death-rate among infants has not diminished like that of some of the other infantile diseases, and this should be a direct incentive to everyone to make strenuous efforts to rectify this unfortunate state of affairs. The continued prevalence of the disease may to some extent be due to ignorance, and it is the duty of the educated to do everything in their power by advice, example, and help to convert the uneducated. By adequate preventive measures one might hope not only to greatly diminished the mortality from zymotic enteritis, but also to considerably lessen the attack-rate, and thus indirectly permit many infants to continue their earlier struggles for existence with enhanced premiums, and later to allow them to enter upon a healthier, happier childhood, which in time would tend towards the development of a more robust race.

PREVENTION OF EPIDEMIC (SUMMER) DIARRHŒA.

Each year during the hot weather in summer and autumn a large number of infants are attacked by a serious disease called summer diarrhœa, and many of them die from this disease. The disease, though dangerous, can to a very large extent be prevented, and it is earnestly hoped that mothers will take precautions to save their babies' lives.

There is good reason to believe that the *common house-fly* is a very important agent in spreading the disease, and you are requested to make every effort to keep the fly out of your house. Remember that the fly feeds on, and breeds in, all sorts of decomposing filth, such as stable manure, decaying garbage, etc.; that it may carry away some of this filth on its legs and body, and may be covered with millions of death-producing germs; that if it afterwards settles on food, and especially milk, that will be contaminated, and it is very dangerous to give such polluted milk to your infants. Therefore use fly-papers in the warm season. Keep your windows closed, and do not allow your door to stand open all day. Store the milk in clean, covered dishes in some place to which flies have not access, and do not keep your food in any room near a privy, drain, etc. *Burn* all animal and vegetable refuse, such as fish-heads, bones,

tea-leaves, potato-parings, etc. *Do not* throw such refuse into your back-yard or place it in uncovered ash-bins. Keep your house and outdoor premises clean, and especially do not permit dust to collect in the apartment where your food is stored. Dust in every form is dangerous to health, and for removing it wet cleansing is preferable to dry. Do not allow sinks, drains, etc., to become choked. Report at once to a public health official any nuisance such as choked drain, and any manure-heap in the neighbourhood which is attracting large numbers of flies.

Bear in mind that the fly season is the diarrhœa season, and remember that absence of filth and dust means absence of flies.

BEWARE OF THE FLY.

Very few babies who are fed entirely from the breast die of this disease, and therefore you are strongly urged to suckle your infants at the breast. If you cannot give your child sufficient nourishment by this means do not take it off the breast. *It is far better to feed from the breast and by bottle alternately than to feed by bottle only.*

On no account wean your infant during the hot months of July, August, and September. If your breast-milk has become scanty, continue to give your infant this as much as possible and make good any deficiency by using cow's milk. Avoid giving condensed milk (especially the cheaper brands) and patent foods, and *never* feed your baby on *anything that is going*.

When cow's milk is employed the milk should be boiled when it comes into the house and kept in the coolest place. Keep the baby's bottle scrupulously clean, and reject at once any milk which smells sour. Use only boat-shaped bottles. *Never* employ bottles with long tubes, which are always dangerous. Thoroughly wash the feeding-bottle after each meal, and see that the nipple is turned inside out and well scalded.

Do not give your infant a "dummy teat" to suck.

Never neglect any case of diarrhœa, but obtain medical advice at once. Always stop giving milk, and until the doctor arrives give nothing but boiled water or white-of-egg water.

Try to *prevent any spread of the disease*. Never leave soiled napkins, etc., lying out, but place them in boiling water or disinfectant, and always carefully cleanse your hands before preparing any food. Take the infant daily for an outing in the open air and be careful not to overclothe the child.

MOTHERS, PROTECT YOUR INFANTS.

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- (33) ROBERTSON, JOHN.—‘Edin. Med. Journ.,’ March, 1910.
- (34) DAVIES, SIDNEY.—‘Lancet’ (annotation), 1909, vol. i, 930, and ‘Report to the Woolwich Borough Council on Summer Diarrhœa and Notifications.’

Note.—Any who desire to go more deeply into the subject will find fuller references in the articles marked with an asterisk.

Société de Pédiatrie, Paris.

February the 15th, 1910.

A Case of Acute Encephalitis.—MM. GUINON and AINE showed a boy, aged 4½ years, of robust but slightly rickety appearance, who, eight or ten days after a normal attack of measles, had several falls without loss of consciousness, pain, or vomiting. A month later he presented rigidity of all the limbs, but the nuchal region was normal. There was also a peculiar cerebral condition characterised by a kind of intellectual torpor without meningeal phenomena and without Kernig's sign. Ten days prior to the onset he was possessed of perfect intelligence. Little by little the symptoms improved, the incontinence of fæces disappeared, the mental condition became better, but the contractures remained. The symptoms resembled those of a cerebral sclerosis. Lumbar puncture drew off a clear fluid without pressure, containing some fibrinous threads, but no albuminous reaction or definite cytology. The fundi oculi were normal.

Treatment of Œdema and Sclerema in the New-Born.—M. HENRI DUFOUR noticed that since the use of impermeable silk to wrap up debilitated and premature infants from the neck to the feet he had observed no cases of either œdema or sclerema in his clinic. This simple and easy procedure seemed to constitute the best method of combating the frequent and rapid loss of heat in weaklings.

M. VARIOT thought that this method would have the effect of abolishing the incubator.

Malformation of the Brain; Death from Hydrocephalus.—MM. VARIOT, LONG, and ROUDINESCO described the case of a child apparently normal during the first two months of life and then attacked by a progressive hydrocephalus. The autopsy showed a marked degree of cerebral malformation, the hemispheres being mainly absent, the basal ganglia alone being seen; rudimentary frontal and occipital convolutions represented the remains of the vault. A woodcut is given in Bulletin No. 2.

Note on Tuberculous Arthropathy with Valvular Lesions.—M. BARBIER showed specimens from a child who had had the clinical appearance of rheumatic fever and who proved tuberculous. The girl, aged 15 years, was the subject of frequent arthralgic attacks with slight swelling and hydrarthrosis. He came under the author's notice when in his seventh attack. Auscultation gave signs of mitral and aortic incompetence and there was slight dulness at one apex. After leaving the hospital she returned five years later with more marked cardiac signs; cuti-reaction was negative. At the autopsy there were destructive lesions of both lungs, pericarditis with adhesions, and a vegetative endocarditis, the tuberculous nature of which was shown by inoculation. The author also related another case of a girl, aged 13 years, subject to frequent attacks of rheumatism and showing unmistakable signs of mitral incompetence. She was treated as being tuberculous and left the hospital much improved. The author thinks that a place must be reserved for tuberculosis in the ætiology of endocarditis.

Three Cases of Laryngostomy for Cicatricial Stenosis.—M. GUISEZ reported three cases operated on of children obliged to wear a tracheotomy tube for crico-tracheal cicatricial stenosis. This operation enabled them to do without the tube. It was performed for the first time by Killian and popularised by Sargnon, and consists in a section of the thyroid and cricoid cartilages and the resection of all cicatricial tissue; then, leaving the cavity widely open, progressive gum-elastic dilatation is practised.

VINCENT DICKINSON.

March the 15th, 1910.

Case of Ectopia Cordis.—M. VARIOT described this case, of which an illustration is given in Bulletin No. 3. The infant, a male, lived fifteen hours, and was the first-born of a young woman married ten months. No history of monstrosity in the family. A large red swelling occupied the centre of the thorax, which consisted of the heart without pericardium, the large vessels forming a pedicle.

Double Invagination of the Small Intestine Complicating Typhoid Fever in an Infant.—MM. LESNÉ and AINE related the case of an infant, aged 3 months, suffering from typhoid fever; there were no spots or enlarged spleen, diarrhœa and fever being the only symptoms. Sero-diagnosis delayed till fifteenth day. No blood in the stools; no abdominal swelling; death took place on the twenty-second day. The autopsy showed the double invagination, which caused no symptoms during life. There were inflamed Peyer's patches and enlarged mesenteric glands.

Flat Vascular Nævus of the Upper Limb.—MM. LEROUX and LABBÉ showed a girl, aged 26 months, the subject of a vascular nævus occupying the whole of the hand, becoming less marked the farther it was from the digital extremities. It existed on both sides, although the right alone showed any hypertrophy. A very slight degree of the same condition was found in the lower extremities, and the right limb seemed the larger. A nervous origin seemed probable. The mother had symmetrical numbness of the hands, especially of the right, without blueness, on waking in the morning or on getting tired at night.

Suffocation due to Hypertrophy of the Thymus.—MM. D'OELSCHITZ, PRAT, and BOISSEAU related this case of a child, aged 4 years, brought to the hospital for diphtheria, but whose symptoms were caused by hypertrophied thymus. A supra-sternal incision with ablation of part of the thymus gave rise to improvement for some minutes. In the presence of fresh symptoms of asphyxia tracheotomy was performed without any lasting benefit. Finally resection of the sternum was practised. Death took place after ten days. At the autopsy there was acute mediastinitis and pleurisy from infection by the trachea. The thymus completely surrounded the trachea.

Simplification of Tubage Instruments.—M. E. C. AVIRAGNET showed an instrument which rendered tubage easy and rapid (illustration). It somewhat resembles that of O'Dwyer, but differs from it in the absence of a propeller and extreme simplicity in fixing the stem on the handle.

Case of Oxycephalus with Optic Atrophy.—Dr. TERRIEN showed a girl, aged 7 years, suffering from blindness with proptosis. The shape of the head was markedly elongated. Ophthalmoscopy showed optic nerve atrophy, probably due to a compression of the nerve in the optic foramen.

VINCENT DICKINSON.

Philadelphia Pediatric Society.

SPECIAL PUBLIC MEETING, Tuesday, March the 22nd, 1910, CHARLES A. FIFE, M.D., President.

SYMPOSIUM ON MENTALLY DEFECTIVE CHILDREN.

Obstetrical Accidents Causing Mentally Defective Children.—Dr. EDWARD P. DAVIS, by invitation, read this paper. He discussed the accidents of pregnancy and of labour which might cause mentally defective children. Among the accidents of pregnancy may be mentioned sudden or violent mechanical force or great nervous shock, malnutrition, hereditary defects, race degeneration from alcoholism and syphilis, toxæmia and acute infections. The accidents of labour may be due to pressure and asphyxia, occurring with unattended labour, abnormal labour, ill-chosen or badly performed obstetric operations. Dr. Davis also showed how most of these accidents could be prevented.

The Relation of Ocular Defects to Defective Mentality in Children.—Dr. WILLIAM T. SHOEMAKER, by invitation, read this paper. He considered children who were deficient or backward, but tractable, offering promise of betterment or standardisation. The relationship between ocular defects and defective mentality is not one of cause and effect, but both mental and ocular defects are equally related to some other common cause. The observed phenomena belong, as a rule, to that class designated by Walton as "deviations," in contra-distinction to the so-called "stigmata of degeneracy," and children so affected are better classed as deviates than as degenerates. These deviations may be noted in any part of the ocular apparatus, and range from harmless anomalies of congenital origin to more serious conditions, either primary or secondary. Among the common deviations are malshaped skulls, with facial asymmetry and abnormally placed orbits, defects in the extra-ocular muscles, congenital defects and diseased condition of the eyelids, anomalies in the iris, lens, uveal tract, retina and optic nerve, and, finally, errors of refraction. These conditions and their sequelæ may act as a source of peripheral irritation; others, such as congenital cataract and errors of refraction, may obstruct or prevent mental development. Backward children do not, as a rule, suffer from eye-strain; they seldom have headache referable to the eyes, because they have little interest in such use of their eyes as would cause asthenopia. Ametropia is not a cause of mental deficiency in children, but is a serious obstacle in the way of mental development. In dealing with defective children all obstacles must first be removed, and it must be remembered that all knowledge of the outside world must reach a child through the special senses. The best possible vision with the least possible effort and

attention to the protective apparatus of the eyeball are important. Parents, guardians, and teachers should be instructed in the medical status of the backward child, should be taught the possible significance of the outward signs of backwardness, and should search for peripheral irritation and obstruction, particularly for those connected with the organs of special sense.

The Hearing and Speech of the Backward Child.—Dr. G. HUDSON MAKUEN, by invitation, read this paper. He said that three important cerebral faculties—hearing, speech, and intellectualism—are so closely interwoven in respect to their functional activities that no one of them can reach its highest point of efficiency without a corresponding development of the other two. So great is the dependence of the glosso-kinæsthetic centre upon the auditory speech centre that the former has never been known to come into existence prior to the development of the latter, except through special training. In this training an effort is made to make up for the lack of hearing by establishing a communication between the glosso-kinæsthetic area of the brain and the visual and tactile centres. Without a certain degree of intellectualism there can be no orderly development of language, and without the development of language there can be no orderly development of intellectualism. The character of speech is an index to the faculty of hearing and to the other important cerebral functions. The deaf child does not learn to speak because speech is developed only by the imitation of words that are heard, and the feeble-minded child does not learn to speak because it requires a certain amount of intellectualism to train and develop the lower speech centres. The character of the speech furnishes a scientific basis for the diagnosis and treatment of atypical conditions of childhood. For practical purposes two classifications of defective children should be made: those whose defects are organic, and those with functional defects. This is not always easy to do. The various cerebral faculties are to the individual what tools are to the mechanic, and we should no more expect a child to develop intellectualism without hearing and speech than we should expect a carpenter to become a skilled mechanic without a hammer or saw. Dr. Makuen then exhibited two children: one, formerly backward, has eliminated himself from the backward children by developing speech and a fair degree of mentality; the other, backward because of deafness, is developing speech through the substitution of the visual and tactile centres for the undeveloped auditory centres.

Possibilities of Development for Mental Defectives and the State's Care of them.—Dr. MARTIN W. BARR, by invitation, read this paper. He reviewed work done in developing defective intelligences from the beginning of the nineteenth century. In 1800 Itard formulated the first scheme for training imbeciles. This was modified by Seguin, and later, at Bicêtre, attracted the attention of Europe and America. By the middle of the century Seguin carried the work on in America himself, and public and private institutions were built. Then these cases were grouped distinctly, with means for development adapted to their several needs. The experience of a century is embodied in an educational classification by means of which teaching and training are conducted on simple physiologic lines, with assurance of a certain successful development for these, who must, however, always remain defective. Pennsylvania, at first providing for her helpless class only in the institution at Elwyn, with which, in its inception, Seguin was associated, has later opened institutions at Polk and Spring

City; yet this provision for over 2500 does not yet meet the requirements of the ten thousand mental defectives credited to this state.

How to get the Best Results in Training the Mentally Deficient Child.—Mr. E. R. JOHNSTONE, by invitation, read this paper, giving first the results of training mentally deficient children in the past. Training before seven and continued after sixteen is seldom of any value. If the child is defective he should be under custody all his life. As his time for learning is short we must limit the things presented to him to those we know are important. He must know enough to read simple things, to write his name and a simple letter, and to count money. First try to find the things that make the child happy, especially things to do with his hands. The teacher should begin with things the child knows and then work to the unknown, the names of things, their uses, etc. But the child's time is too short to give him anything else, unless he uses all you give him and asks for more. Girls may become good house-girls; boys assistants to carpenters, plumbers, painters, etc.

Dr. J. D. BURKS, Director of the Bureau of Municipal Research, in opening the discussion, called attention to the necessity for getting school officers, teachers, parents, and the public to face the facts concerning mentally defective children. There is need for a standard series of tests or measurements, by which a person without expert knowledge can grade a child roughly, so that he may know something definite about the children under his care and refer doubtful or abnormal children to the expert for diagnosis. At present only the most obvious types of mental defect are considered by teachers and parents as requiring special attention. A large number of pupils in every public school fail to profit by school training; they are wasting time, their time and that of teachers, principals and other pupils, because they are misplaced, misunderstood and mistreated by those adults who are responsible for knowing the facts as to physical and mental defects, and for adapting school methods to children's needs.

Dr. JAMES THORINGTON added that in sixteen years' experience in examining mentally defective children at the Elwyn and Vineland Training Schools he had noted great improvement in mentality follow the use of glasses. Some of the children would consider glasses nothing less than a toy or something to destroy. About 75 per cent. of children needing them, among the high and middle grades, would appreciate the glasses and wear them. Glasses were ordered whenever the error was over one dioptré in strength. It was common to find unusual amounts of high astigmatism and of unusual axes as compared with normal children. The glasses are a great factor in opening to the brains of these defective individuals one pathway to a more perfect appreciation of surroundings, and by correction or relief to eye-strain, excessive in nearly every instance, the child is put in a more quiet and receptive mood. The change in disposition from irritability and temper to a gentle and cheerful nature was often noted after correct glasses were prescribed. Just as normal children have their eyes examined so should the mentally defective, and whenever glasses are indicated they should be ordered and given a fair trial.

Dr. WALTER S. CORNELL stated that the record of a child's present ability is often a poor index to his real capabilities. A charted record of psychological tests alone tells nothing certainly in border-line cases. The diagnosis of feeble mind, like that of insanity, is essentially a medical subject, and is a judgment of the various effects of heredity, organic brain-defect, health,

environment, and age upon the individual's mental development. There is a great difference between public school children and institution children in environment, and in cases of doubtful mental development the elimination of this factor in institution children makes diagnosis much easier. The only attempt so far made to devise a system for recording mentality which at the same time forms a judgment for the examiner as to the existence of feeble mind is the test series of Binet. He provides several tests for children of every age, using tests asking knowledge which is acquired unconsciously and independently of school education. These tests have not yet been tried on public school children. If they correspond well to age-periods they will provide a method whereby it may be said that a child is so many years behind his normal age-development. In such cases this will supply the need of which Dr. Burks has spoken.

Dr. S. D. RISLEY said that one of the highest functions of the medical profession was the aid and direction it could give in sociologic studies. He believed that all medical schools should have an additional chair devoted specifically to the study and teaching of sociologic medicine. Dr. Risley said that the classification of backward children in the public schools could be done wisely only by experts like Dr. Barr or Mr. Johnstone, both of whom had had wide experience in the grading of imbeciles. There were many children backward in their studies at school from a great variety of causes, who had normal brains, to whom it would be an injustice to be classed with the congenitally feeble-minded. Backwardness might be, and often was, caused by defective vision or hearing. Dr. Makuen has well illustrated the importance of defects of the special senses; his explanation was not only illuminating but suggestive. The concordant action of the special senses, through their association centres, over the intellectual processes had not received due attention. It was not to be expected that a clear mental concept could be had from a blurred and incorrect visual image due to congenital ocular defect, which might be corrected by glasses or other means, but mental backwardness due to such causes should not be confused with the hopeless conditions found in the congenital imbecile. In the one case the avenues of approach to a normal brain were impaired, in the other the avenues might be open and normal, but the brain hopelessly defective.

Dr. ERNEST LAPLACE thought that the whole question was one of diagnosis. Backwardness in children is due to inherited or acquired causes. From a surgical standpoint, among acquired causes, he has established a trilogy: backward children should always be examined for adenoids, phimosis, and tongue-tie. He would also advocate a new chair of eugenics, the purpose of which would be to pass upon the aptitude of children toward education and to rectify impediments thereto.

Dr. MAKUEN said that all children should be taught to speak. Stammering often results from laughing at "baby-talk," when the correct articulation should have been taught the child. In some children speech would never develop at all unless efforts were made to help the child to speak. This is true of the child that was exhibited this evening.

Mr. JOHNSTONE added that after all remediable defects had been attended to the Binet test was of value. One must always remember that there is a great number of children of whose mentality we can never be absolutely certain—children on the border-lines between mental deficiency and defective mentality. The family history is of much importance and should be obtained in every case. While he believes in culture for normal men, Mr. Johnstone wants primarily to teach each deficient child what will make

him happy, training him in all that he can use and enjoy. He also believes that a child must learn to understand a thing before he can intelligently be taught to talk of it; he tries to have the child know things and then begins to teach him to talk about them.

Abstracts from Current Literature.

Medicine.

Diagnosis of tuberculosis in young children (*'Arch. of Pediat.,'* xxvi, 1909, p. 481).—**H. L. K. Shaw** and **A. T. Laird** review the various methods of detecting tuberculosis in young children, and strongly emphasise the diagnostic value of skin tuberculides. Hamburger found them in nearly all his cases of tuberculosis in infants. They are frequently overlooked, as not more than two or three can be found on the entire body. They are small round papules, red in colour at first but later often brownish, and covered with a scale which is easily stripped off. Removal of the scab does not cause bleeding, and there is never any tendency to ulceration. Their tuberculous origin is proved by their histological structure, the presence of tubercle bacilli, and experiments on animals.

J. D. ROLLESTON.

Relation of infectious diseases to tuberculosis (*'Arch. of Pediat.,'* xxvi, 1909, p. 490).—**E. P. Copeland** thinks that tuberculosis is a comparatively rare complication or sequela of measles, whooping-cough, or influenza, that its development almost invariably depends on the pre-existence of a latent focus of infection, and that its dissemination is due to a lymphatic activity accompanying the pulmonary catarrh which so frequently occurs in these diseases.

J. D. ROLLESTON.

Pulmonary gangrene in children (*'Arch. of Pediat.,'* xxvi, 1909, p. 534).—**W. P. Lucas** records a typical case in a rickety boy, aged 15 months, whose principal symptoms were sallow colour, rapid and laboured respiration out of proportion to the physical signs, paroxysms of coughing, and on the day before death gangrenous odour of the breath. The autopsy showed gangrene of the left lung, and tuberculous nodules in the right lung, liver, spleen, and small intestines. There was no meningeal involvement.

J. D. ROLLESTON.

Tertian malaria with gastro-intestinal symptoms (*'Arch. of Pediat.,'* xxvi, 1909, p. 525).—**J. J. Phillips** records two cases in children aged 19 and 20 months, in whom malaria closely simulated gastro-intestinal catarrh of bacterial origin. In neither case was there a chill nor a splenic tumour. Fever did not occur in the first case before the third and in the second case before the ninth day. Irrigation of the colon with normal saline and injection of quinine sulphate high up into the bowel are recommended.

J. D. ROLLESTON.

A case of so-called congenital malaria (*'Arch. of Pediat.,'* xxvi, 1909, p. 517).—**F. S. Meara**.—A male child, whose parents had both

suffered from malaria during the seventh month of his intra-uterine life, appeared quite healthy at birth, but within a fortnight, though breast-fed, began to lose weight, and a swelling developed in the groin and scrotum. When admitted to hospital at the age of seven weeks for hydrocele of the cord he had no symptoms suggesting malarial infection, but in the course of a routine examination the spleen was found to fill the left half of the abdomen and the liver to extend down to the umbilicus. Examination of the blood showed numerous plasmodia of the tertian type, marked poikilocytosis, great variation in the size of the red cells, numerous nucleated red cells, mast cells, and a few myelocytes. In spite of quinine treatment the loss of weight continued, and the child died a few days after admission.

J. D. ROLLESTON.

Appendicitis in infectious disease (*Thèses de Paris*, 1908-9, No. 243).—**R. Schmousky**, after discussing the incidence of appendicitis in other infectious diseases, deals more particularly with its occurrence in measles. The complication may occur at any period of the disease or in convalescence. As a rule it runs a mild course and yields to medical treatment. Possibly larval forms of appendicitis may occur, to detect which a systematic and minute examination of the abdomen should be made in every case of measles. The thesis contains the histories of thirteen cases, five of which are original (*cf.* BRITISH JOURNAL OF CHILDREN'S DISEASES, 1909, pp. 37 and 131).

J. D. ROLLESTON.

Scarlet fever at the Hôpital des Enfants Malades (*Thèses de Paris*, 1908-9, No. 242).—**P. Dumas**.—535 cases were admitted during 1908: 281 were boys, 254 girls. Twenty-two died—a mortality of 4.1 per cent. The deaths occurred almost exclusively between the ages of one and five years. Forty-five cases developed otitis, 16 in both ears, 29 in one ear only. Albuminuria occurred in 15 cases, nephritis in 3 only. Twelve cases developed rheumatism, 9 broncho-pneumonia (8 deaths), 2 empyema (both fatal), and 1 purpura hæmorrhagica (recovery); 4 had relapses. Treatment consisted in keeping all the patients on milk diet until the twentieth day, when the diet was gradually increased if no complications had developed. Buccal and naso-pharyngeal antisepsis was attempted by washing out the mouth several times daily with boiled water and peroxide of hydrogen, and by swabbing the throat with a mixture of iodine, potassium iodide, and glycerine. Purulent otitis was treated by syringing the ears with peroxide of hydrogen followed by instillations of carbolised glycerine.

J. D. ROLLESTON.

Clinical study of anterior poliomyelitis (*Arch. of Pediat.*, xxvi, 1909, p. 507).—**H. Heiman**, in a study of forty cases observed during the New York epidemic of 1907, states that the two most prominent features of the epidemic were the onset of the disease with signs of meningeal irritation and the occurrence of bulbar symptoms. This led to the erroneous diagnosis of cerebro-spinal fever being occasionally made. Heiman distinguishes three kinds of bulbar cases. In one bulbar symptoms alone were present. In the second type bulbar symptoms were followed by paralysis of the extremities. In the third type paralysis of the limbs first occurred, and bulbar symptoms subsequently developed. The types were due to the variable localisation of the inflammation in different parts of the brain and cord. The purely bulbar cases should be classified under acute polio-encephalitis, superior and inferior, the cases with spinal symptoms under

acute polio-encephalo-myelitis. The prognosis of cases with bulbar symptoms is very unfavourable, more than half being fatal, whereas none of the cases without bulbar symptoms died.

J. D. ROLLESTON.

The urine in the gastro-intestinal diseases of infancy (*'Arch. of Pediat.'* vol. xxvi, 1909, p. 561).—J. L. Morse and B. Crothers, in an examination of the urine in 300 cases, found that albumin was present in from 8 to 10 per cent. of babies suffering from gastro-intestinal diseases. The albumin was somewhat more frequent in acute than in chronic cases, was always slight in amount, and hardly ever associated with casts. Its presence had no effect on the prognosis. Examination of the sediment showed that the process was one of pyelitis or pyelonephritis rather than acute parenchymatous or interstitial nephritis. The occurrence of œdema and such nervous symptoms as restlessness, convulsions, and stupor in gastro-enteric disease are attributed to toxæmia, and not to uræmia.

J. D. ROLLESTON.

Case of steatorrhœa following mumps (*'La Pediat.'* September, 1909, No. 9, p. 674).—G. Finizio describes the case of a boy, aged 11 months, brought up exclusively by the breast for seven months, then by a mixed milk feeding till the ninth, and afterwards, owing to the mother's illness, was weaned. At this time he was given six meals daily of about 160 gr. of cow's milk, with a spoonful of rice or semolina added once or twice in the day. The fat in this milk was 4 per cent., and the child weighed 6·300 kgrm., and had cut six incisors. A typical attack of mumps now occurred, after the fifth day of which the child's temperature was 39·3° C., and he was fractious and evidently suffering from abdominal pain; there was slight vomiting. During the following days the pain grew less and the vomiting ceased, but an obstinate diarrhœa continued, and about a fortnight from the beginning of the attack of mumps his weight had fallen, and he had four to five actions daily of a very liquid character and offensive odour, of a greenish-white colour, and having several small lumps of a semi-solid greasy nature, insoluble in water, but completely so in ether. Filter-paper soaked in this ethereal solution, when dried, was translucent as if it had been immersed in oil. Microscopic preparations of the small lumps showed a quantity of small drops of varying size, soluble in ether and chloroform, and stained black with osmic acid and red with Sudan III. With dilute phenic fuchsin after Ziehl's method a few fatty acid crystals were seen. The amount of fat in the fæces was six times that of a healthy infant on the same experimental diet. With a fat-free diet in which the fat in the milk was reduced to ·5 to 1·0 per cent. and the administration of pancreatin, the stools gradually became normal.

VINCENT DICKINSON.

The pathology and treatment of purpura in children (*'La Pediat.'* September, 1909, No. 9, p. 641).—A. Muggia discusses the various forms of this affection and gives reports of clinical cases. He concludes that purpura in children is met with in many pathological forms and under protean aspects; hence the treatment is varied, and must be directed primarily to the ætiological element, and afterwards to the hæmorrhagic manifestations. For the latter, injections of horse-serum or anti-diphtheritic serum may be given with benefit, but they must be had recourse to early and repeated according to the intensity and duration of the hæmorrhage. In children suffering from purpura they cause a violent reaction, but are

generally well borne. Improvement is rapid and persistent, and although they do not of themselves cause any striking modification of the morphological elements of the blood, they increase the fibrinogen, and thus, by checking hæmorrhage, improve the condition of the blood in a marked manner.

VINCENT DICKINSON.

The milk of tuberculous women (*'La Clin. Infant.,'* November, 1909, No. 22, p. 692).—**Paul Patron**, of Nantes, has made a number of experiments on the milk of tuberculous women, and arrived at the following practical results. Suckling being a fatigue, the consumptive mother, in whatever stage of the complaint, should not suckle, in spite of the indisputable advantages of maternal feeding. The port of entry of pulmonary tuberculosis being frequently the digestive system, the nursing of a consumptive must not have the mother's milk nor that of another consumptive nurse. When injected, boiled, in doses of 5 c.c., into the cellular tissue of a tuberculous guinea-pig, this milk produced, in more than half the cases, a reaction analogous to that caused by tuberculin, while, when injected into a healthy control animal, this reaction was absent. This reaction takes place whether there are, or are not, tubercular mammary lesions. When injected raw into the cellular tissue of a healthy guinea-pig in doses of 2–3 c.c. it was capable of causing tuberculosis. The milk of healthy women inoculated into tuberculous guinea-pigs only gave once out of four times a slight rise of temperature, which even in this case did not reach that caused by the injection of tuberculous milk. The milk of a tuberculous cow or other animal is as dangerous as that of a woman, and every precaution must be taken that milk is not supplied by animals which react to tuberculin.

VINCENT DICKINSON.

An epidemic of infantile paralysis (*'La Presse Médicale,'* 1909, No. 87, p. 767).—**R. Romme** draws attention to the reports of Krause and Meinicke (*'Deutsch. med. Wochens.,'* 1909, No. 42, p. 1822) of this epidemic which broke out in June to August of this year in Westphalia, 436 persons, almost exclusively infants, between five weeks and fifteen years being attacked, and of whom sixty-six died. The disease was imported by two Swedish engineers who came to Hagen from a district in Sweden, where there had been an epidemic, and took up their abode in a family in which the first case occurred. Throughout the epidemic adults frequently acted as carriers of the infection. A striking point was the frequency of intestinal lesions disclosed by the autopsies, and which suggests the question whether polio-myelitis is not caused by some intestinal infection. Investigations on this point with regard to food, water, milk, bread, meat, vegetables and fruit gave negative results, as did also those made with regard to bites of insects and the coincidence of an epizootic epidemic among chickens. Various micro-organisms were found in the stools, urine and tonsils, but these were not present in the blood, cerebro-spinal fluid or viscera. Inoculation experiments on animals were also ineffectual, but in a certain number of cases inoculations gave a positive result in rabbits, and Meinicke thinks this fact may give a clue to the discovery of the cause of this disease.

VINCENT DICKINSON.

Dementia choreo-asthenica, with juvenile nodular hyperplasia of the liver (*'Münch. med. Wochens.,'* November 17, 1908).—**Anton** saw a case in late childhood in a girl who was the subject of congenital syphilis.

The first signs noticed were irregular movements of the facial muscles; later the gait became unsteady and staggering, and was associated with inco-ordination of the arm muscles. Paralysis did not occur until near the end of the disease, but the muscles became easily exhausted. Choreiform movements of the face and limbs gradually became so severe as to make purposive movements almost impossible, and even phonation and mastication were difficult. There was also progressive dementia, but it was never extreme. Death occurred in convulsions. From the time the child first came under observation there was sugar in the urine. At the necropsy the liver was found to be enlarged and studded with irregular nodules—juvenile nodular hypertrophic cirrhosis. In the brain were numerous foci of softening, especially in the lenticular nuclei. There was also a large area of softening in the left frontal lobe, and degeneration of the white matter in both lobes of the cerebellum. The foci of softening were attributed to the vascular changes caused by syphilis.

T. R. WHIPHAM.

Tuberculous peritonitis in the nursling (*Arch. de Med. des Enf.*, June, 1909).—**Wiel** and **Pehu** are of opinion that the caseous form of tuberculous peritonitis is the commonest amongst nurslings, and that caseous tubercles are present in the peritoneum in the majority of cases. Concomitant tuberculous lesions of the intestines also are very common. In both sexes caseous tubercles in the genitalia are a characteristic feature, and are probably due to an infection carried by the blood-stream, while diffuse tuberculous lesions in other organs are usually found. The chief clinical manifestations are abdominal distension, vomiting, diarrhoea, and progressive wasting. On palpation there is usually pain and tenderness, and enlarged mesenteric or retro-peritoneal glands can often be felt. The liver and spleen are also at times enlarged. In females there is frequently a purulent vaginal discharge, and in males a rectal examination reveals an infiltration around the prostate or seminal vesicles. Most cases are apyretic except when complicated by a secondary infection. Wasting is pronounced and progressive, and the termination is usually fatal as the result either of marasmus, of a secondary infection, or of meningitis. Recovery, however, sometimes occurs, and usually in the ascitic form, which is comparatively rarer in infancy than in later life. The treatment is practically the same as in older children. Paracentesis is often of value, but laparotomy is apparently no more efficacious than conservative treatment.

T. R. WHIPHAM.

Bacteria in top-milk (*Journ. of Infectious Dis.*, June, 1909).—In view of the fact that top-milk is so often advocated, at least by American writers, for the use of artificially fed infants, **Anderson's** investigations are important. He finds that the top layer of milk which has been allowed to stand contains from 10 to 500 times as many bacteria per c.c. as the mixed milk, and that a similar but greater difference exists between centrifugalised cream and the milk itself. The bacteria are carried upwards by the cream particles in large numbers, only a comparatively small quantity falling to the deeper parts. Thus there may be a great danger in feeding infants with top-milk as compared with whole milk, and this may explain the fact that children often do badly when fed in this manner. The diarrhoea may be due to micro-organisms rather than to a faulty proteid or fatty content. The investigation forms an additional argument in favour of feeding with mothers' milk.

rather than that from the cow. The investigations of **Hess** (*'Pediat.,'* August, 1908; *'Journ. of Amer. Med. Assoc.,'* August 14, 1909) show that if tubercle bacilli are present in milk they are found in greater numbers in the skim-milk, and that in bottled milk inoculated with typhoid bacilli the same thing occurs. He therefore advises the rejection of the top-milk in infant feeding, and uses the "middle-milk," the proportions of which can easily be estimated.

T. R. WHIPHAM.

Hereditary spastic paraplegia (*'Journ. of Amer. Med. Assoc.,'* July 31, 1909).—**Punton** has seen seven cases of this rare condition. In the first family four members were affected—the mother, aged 59 years, in whom the disease occurred after her marriage at the age of 23; a son, aged 34 years, in whom it began at 16; a son, aged 32 years, in whom it began at 15; and a son, aged 24 years, in whom it began at 14 or 15. The second family showed three cases—the mother, aged 43 years, in whom the disease began at 33; a daughter, aged 7 years, who had been affected for a year; and a daughter, aged 5 years, in whom it began in infancy. As the disease is incurable the only measures to be taken are prophylactic, and consist in discouraging marriage in persons with a tendency to this disease.

T. R. WHIPHAM.

Diagnosis of tuberculous bronchial glands in children (*'Arch. f. Kinderheilk.,'* L., 1909).—**Cozzolino** has been able to diagnose tuberculous bronchial glands in eighteen children between the ages of two and thirteen, the diagnosis being confirmed by the subsequent course of the cases. There were generally more or less anæmia and dyspepsia, and the superficial veins were enlarged. Sometimes the cough was suggestive of pertussis, and sometimes it was accompanied by vomiting. A useful sign was dulness over the fifth and sixth dorsal spines. Occasionally there was dulness between the scapulæ, and in some cases there was marked diminution in the breathing on one side. X-ray shadows are difficult to interpret in the early cases; they are much more useful where the glands are calcified.

T. R. WHIPHAM.

Congenital tuberculosis (*'Jahrb. f. Kinderheilk.,'* July, 1909).—**Riet-schel** saw a case of congenital infection with tubercle. The child was the offspring of a woman, aged 30 years, who had advanced tuberculosis. Immediately after birth it was wrapped in a towel and placed ten feet from the mother. In twenty minutes it was bathed in an adjoining room, and within forty-five minutes of its birth it was transferred to a foundling's home. There was no sign of tuberculosis at first, but evidence of disease was found after about a month. The child died from generalised tuberculosis at the fourth month. The writer considers that the infection probably occurred during delivery—intra-partum infection. As many infants are unable to produce antibodies, infection during birth is invariably fatal whether the child is taken away from its mother or not. If tuberculosis does not develop until after the sixth month, infection probably occurs after birth. Intra-partum infection is commoner than is usually supposed, and there are no grounds for supposing that the bacilli lie latent in the child, which is one of the premises of Behring's theory of tuberculous infection in early infancy.

T. R. WHIPHAM.

Pseudo-hypertrophic muscular dystrophy (*'New York Med. Journ.,'* August 28, 1909).—**Potter** saw a case which supports the view that there

may be transitional forms of dystrophy, in which changes in the nervous system are associated with diseases of the muscles. The patient was a boy, who, at the time of his death from pneumonia at the age of fifteen, was unable to use the lower and, to a less extent, the upper limbs. There was hypertrophy of the calf and thigh muscles, with atrophy of the thoracic, shoulder, and arm muscles. The abdomen was protruded and the reflexes were absent. At the necropsy there were typical changes in the peripheral muscles; the peripheral nerves were small and degenerated, and the anterior roots showed similar changes. The anterior horn-cells were degenerated, especially in the lumbar region, the changes being most marked in the ventro-mesial group and in those of Clarke's column. The liver was large and fatty, and the heart muscle showed atrophy and fatty infiltration with slight fibrosis.

T. R. WHIPHAM.

The cutaneous tuberculin reaction in children (*Jahrb. f. Kinderheilk.*, Bd. 69, Heft 6).—**Hellesen** tested Pirquet's reaction in 418 patients up to fourteen years of age in the University Children's Clinic in Christiania. His results correspond on the whole with those of other observers, but contrary to Pirquet he found an increase of positive reaction after the age of two years. He considers the reaction specific, and a harmless and valuable diagnostic help to the discovery of tuberculosis in children, and that a negative reaction in any period of childhood has an especially great significance.

J. E. BULLOCK.

Icterus neonatorum (*Jahrb. f. Kinderheilk.*, Bd. 69, Heft 6).—**Hasse**, in a short communication illustrated by three diagrams, takes the view that the ordinary jaundice of the new-born is an obstructive jaundice, which sets in on the commencement of diaphragmatic breathing during the first few days of life and finally disappears. According to Hasse, it happens that through the sinking of the diaphragm during inspiration compression of the excretory ducts of the liver and the large vessels; especially the portal vein, is increased, and thus the bile is impeded in its normal flow and is absorbed. Hasse considers that the compression diminishes after a little while, following the decrease in size of the liver, brought about through the respiration and the changes in its position affecting its portal vessels and excretory ducts as well as the underlying duodenum.

J. E. BULLOCK.

Treatment of tuberculous children with large doses of tuberculin (*Münch. med. Wochens.*, No. 44, 1909, p. 2288).—At the Congress of German Physicians held in Salzburg, September, 1909, **Fuchs** reported the results which he had obtained in tuberculin treatment by Schlossmann's method. In thirteen surgical cases and five cases of simple apex affection he had obtained no good result, and in one division of the cases he was convinced of distinct harm, and the extension of specific processes in remote parts of the body was evident. Further, he reported that after an injection he had observed a peculiar extensive skin-reaction in the neighbourhood of the infected area. In the discussion which followed **Schlossmann** stated that he had never seen anorexia and anæmia follow his method of treatment; he had never spoken of cure in an infant, but of tuberculous infants which were treated not one had died. **Escherich** was of opinion that we do not yet know the course of tuberculous lesions in children. He had never seen harm follow the treatment, but tuberculin could not effect a positive cure. He considered it inadmissible in the treatment of children with

progressive tuberculosis. **Ganghofer** recommended only small doses. **Schlossmann** was opposed to **Hamburger's** views with respect to the infection of young children with tuberculosis, as had been strongly commented upon by **Escherich**. **Bauer** was in favour of tuberculin treatment in selected cases.

J. E. BULLOCK.

Pathology.

The localisation of carcinoma in early life (*'Zeit. f. Krebsforsch.'*, June, 1909).—**Lindemann** gives a compilation of the literature on this subject, and states that there is no absolute limit below which carcinoma may not appear; it has been observed even in the first few months of life. There is, however, a marked difference between the different tissues as regards the early appearance of carcinoma. **Riegel** has recorded two cases of gastric carcinoma in the new-born and one in an infant aged 6 weeks. There are also records of carcinoma of the testicle in a child aged 18 months, of an ovarian carcinoma at nine months, and of cancer of the uterus in a girl aged 8 years. Three cases of carcinoma of the pancreas between the ages of seven months and fourteen years are also reported. The kidneys show a special susceptibility to carcinoma in the young, as more than one third occur before the tenth year and 5 per cent. between the tenth and twentieth years. At least one case of carcinoma (primary) of the liver has been described in the new-born, while among the intestinal growths twenty-three authentic cases before the twentieth year were found.

T. R. WHIPHAM.

Therapeutics.

Treatment of diphtheria (*'Therap. Monatshefte'*, 1909, p. 414).—**Eckert**.—The success obtained by **Pospischill** (*v. BRITISH JOURNAL OF CHILDREN'S DISEASES*, 1909, p. 133) from subcutaneous injection of adrenalin in diphtheria prompted its employment in **Heubner's** clinique at the *Charité* in Berlin. Two to 3 c.c. of the 1 in 1000 solution were given subcutaneously three to four times a day, and its effect on the blood-pressure observed by **von Recklinghausen's** tonometer. The highest rise of blood-pressure was noted during the first two hours after injection, but the action of the adrenalin was not entirely exhausted before seven hours. The subcutaneous method is therefore preferable to intra-venous injection, with which the action of the drug is very transient. Abscesses were never observed at the site of injection as in some of **Pospischill's** cases. The treatment, however, was decidedly painful, and required the frequent application of cold compresses. Glycosuria was sometimes noted, and was most marked during the first two hours after injection. Fourteen hours after the last injection no trace of sugar could be found in the urine.

J. D. ROLLESTON.

The possible utilisation of puppies as breast-pumps (*'La Clin. Infant.'*, November, 1909, No. 21, p. 642).—**G. Variot** is the originator of this quaint and novel idea in an article which deserves reproducing at some length. It has been a virtual necessity, he says, to construct more or less complicated breast-pumps, without much success, in which a vacuum is formed either with the mouth or by bellows. Quite recently an apparatus has been brought forward which is designed to imitate suction movements, but it is evident that no machinery can be as perfect as the mouth of infants or young animals which suckle. The admirable adaptation of the buccal suction to the end of the nipple and the force of aspiration developed by the

lingual piston from the first few days after birth suggest the question, Why not utilise young animals as natural breast-pumps either when we want to accelerate the in-come of the milk and influence the formation of the breasts in certain primiparae, or in women whose infants are too weak to seize the nipple, or, on the other hand, in order to empty breasts which are too full, or to keep up or excite the lacteal secretion whenever necessary? Variot found that the villagers in certain parts of France habitually had recourse to newly born puppies to induce the flow of milk, and asserted that they drew more strongly than an infant. The reason why the practice of this method is not more common is probably because it is not generally known. Given a healthy bitch there is nothing to be feared from the puppies by way of infection. It does not seem any more repugnant for the woman to have her breasts sucked by a young animal than to put a new-born infant to the teat of a goat or ass, as is often done. If blood is drawn by a leech, why not milk by a puppy?

VINCENT DICKINSON.

The cure of stammering (*La Clin. Infant.*, November, 1909, No. 21, p. 657).—Those interested in this subject should peruse a communication made to the Caen Medical Society by Dr. Chervin. Stammering must be considered as a functional neurosis of the organs of speech which develops in early childhood. It is essentially intermittent, but disappears completely in singing. It is always associated with respiratory trouble and nervous fears. His method of treatment is complete in three weeks. The *first week* is devoted to the study of the elements of speech and the methodical exercise of respiration. The respiratory rhythm must first be re-established, and for this purpose the stammerer is taught to breathe and use his respiration from a speaking point of view. This is done by methodical breathing exercises, and expiration is utilised to pronounce isolated and afterwards connected sounds, beginning with vowels. During this week ordinary methods of speaking are forbidden, and this silence also contributes to calm the pupil's mind and make him forget the manner in which he stuttered. In the *second week* liberty of speech is given, which the pupil uses to speak in the way he has been taught. The grimaces, spasms, hesitations and repetitions disappear as if by magic under this method. The *third week* is employed in consolidating the new habit that the pupil has acquired of speaking with precaution and method, and of perfecting his intonation. The marked syllabation is replaced by a slightly accentuated diction, in which all the syllables are pronounced deliberately and without haste. During this last week the pupil is advised to imitate persons who speak well, whose diction is calm and impressive, whose voice is natural and inflections not monotonous, and whose expressions are easy to understand and agreeable to listen to. When the pupil leaves he should be considered a convalescent, and should keep up his exercises for another month for two or three hours daily.

VINCENT DICKINSON.

Treatment of rickets (*Med. Press.*, November 17, 1909).—Zingher compares the results of his treatment of rickets by the old method of phosphorised cod-liver oil with that of a new preparation called "salossit." He begins by giving a short history of the disease. First described by Glisson in 1670, it was soon recognised as a dyscrasia of the whole organism due to faulty hygiene, and sometimes following tubercle, syphilis, etc. Later the digestive system was believed to be one of the primary causes. In 1842, Baginsky and Chassat, experimenting on young animals, produced rickets by

excluding all forms of lime from the dietary in accordance with the chemical theory of the time. Friedleben and Tripièr denied this, and affirmed that rickets was produced when the animals were fed on lactic acid or when this constituted a large proportion of the food. After much controversy it was agreed that both theories contained elements of truth. Zweifel followed next, maintaining that a reduction of chlorides in the blood checked the absorption of the calcium salts, and thereby induced rickets. Later Kassowitz came to the conclusion that the fault lay in the absence of the phosphate of lime, one of the constituents of bone. The rational treatment followed of adding phosphorus to cod-liver oil, then iron, and finally green fruit as a restorative or prophylactic. To obviate the difficulty of patients taking this oil mixture and of obtaining fresh fruit in the winter, various preparations, such as phytol, visvil, and bioson, have been put on the market. The latest is Salossit, which is composed of phosphorus anhydride 1.17 per cent., organic matter 2.32 per cent., calcium .87 per cent., magnesia .16 per cent., saccharum lactis 94.82 per cent., and with it Zingher has had considerable success. Eighteen patients were treated with phosphorised cod-liver oil, and eighteen with salossit. With the latter recovery was more effective and rapid, and not one suffered from gastric or digestive disturbance. In six to eight weeks a striking improvement was observed. With the oil the results were also good, but in seven cases the treatment had to be suspended on account of vomiting and general gastric disturbance. Two were not able to take the oil and finally had to be treated with salossit, when they rapidly improved. The preparation is best given in milk—a teaspoonful twice or three times a day according to age. The large percentage of milk sugar makes it an agreeable food, and it is easily borne by the most delicate child.

T. R. WHIPHAM.

Otology, Laryngology, and Rhinology.

Nasal myo-sarcoma in a child aged 3 years (*Journal of Laryngol.*, November, 1909).—ROSS described this case. Nasal breathing had been obstructed for six weeks; nasal voice; frequent epistaxis. Left naris filled by greyish-yellow, soft, friable mass, encapsuled, bleeding at touch. Removed with forceps, scissors, and electric cautery. Found to be attached to septum at junction of bone and cartilage. Recurrence in two weeks; operation repeated four times, last being on November 30, 1908. No recurrence on May 1, 1909. Pathological report: Myxoma which had undergone sarcomatous degeneration.

MACLEOD YEARSLEY.

Serous meningitis and deafness (*Arch. Internat. de Laryngol., d'Otol., et de Rhinol.*, July-August, 1907).—DE STELLA points out that children are more easily affected by meningitis than adults, and that the predisposing cause is congenital. The real cause is usually some toxin absorbed from the gastro-intestinal tract, which, in many cases, so acts on the auditory apparatus as to leave total or partial deafness. He advises calomel internally, ung. hydrarg. externally, and, above all, lumbar puncture. In this way pressure symptoms are relieved and the deafness cured. The serous fluid is clear, abundant, and aseptic.

MACLEOD YEARSLEY.

The treatment of scarlatinal otitis, with special reference to the value of the radical mastoid operation (*Practitioner*, November, 1909).

—**A. K. Gordon**, in 8685 patients at the Monsall Fever Hospital, found 1708 having discharge from one or both ears during residence. He gives an interesting series of statistical details, and very clearly discusses the essential points of difference between scarlatinal and non-scarlatinal otitis. He believes that the onset of scarlatinal otitis is inevitable, and that it does not, as a rule, occur at all in the mild attacks. There is abundant evidence that these otorrhœas are infective. In moderate attacks of scarlet fever the value of nasal irrigation as a prophylactic is insisted upon. When the nasopharynx is blocked with sloughing adenoids, removal, whatever the general condition as regards pyrexia, etc., is advocated. The vast majority of scarlatinal otorrhœas require no further treatment than frequent irrigation with sterile water or salt solution; 60 per cent. can thus be cured. Fifteen per cent. of patients require operation, and, for reasons given, the radical mastoid is greatly to be preferred. The paper really requires perusal in full.

MACLEOD YEARSLEY.

Surgery.

Acute hydronephrosis in a case of horse-shoe kidney (*'Pediatrics,'* 1909, p. 161).—**J. Hess**.—The patient was a boy, aged 6 years, who had suffered for the past fortnight from vomiting and pain in the right inguinal region, in which a mass could be felt. At the laparotomy the left kidney was found to be larger than normal but not cystic, while the right kidney was full of straw-coloured fluid, which was evacuated. Recovery was uneventful.

J. D. ROLLESTON.

Invagination of the intestine in children and its treatment in Denmark (*'Hospital studende,'* 1909, No. 14).—**Bloch** reports that invagination of the intestine occurs comparatively frequently in Denmark. The non-operative method of replacement, which gave good results in the hands of Hirschsprung (60·75 per cent. recoveries in 107 cases) is still employed by Danish surgeons. He reports nine cases which were treated in the Queen Louisa Children's Hospital while Professor Wichmann was surgeon-in-charge. All nine cases were invagination of the colon or the ileo-cæcal valve; only five were treated within twenty-four hours of the onset of the disease. Laparotomy was performed only in one case; in the others non-operative methods were used. The laparotomy case died, also four of the other cases, of whom two came under treatment after forty-eight hours. He points out that the non-operative methods were unsuccessful, and is of opinion that they can only prove successful in quite early cases. He advises that repeated non-operative attempts at replacement should not be carried out, and that such patients should be placed under a surgeon for operation.

J. E. BULLOCK.

Successful omentopexy in cirrhosis of the liver (*'Intercolonial Med. Journ.,'* June, 1909).—**White** records the case of a girl, aged 9 years, who had been delicate since birth, but for eighteen months previous to admission to hospital had suffered from an increasing swelling of the abdomen. There was no history of intemperance in the parents, but the mother stated that on account of the child's delicate health she had been in the habit of giving her from one half to three table-spoonfuls of whiskey daily. The Wassermann test for syphilis was negative. While in hospital the child was tapped five times at intervals of a fortnight on account of ascites, but

the fluid reaccumulated and the relief was only temporary. The abdomen was then opened and a typical hob-nailed liver was found. The spleen was considerably enlarged. Omentopexy was performed, and after the operation the child was tapped three times in five weeks, but after that marked improvement set in and further tapping was unnecessary. Two months after the operation the child appeared to be in good health and all signs of ascites had disappeared.

T. R. WHIPHAM.

A simple operation for prolapse of the rectum in children (*Med. Rev.*, August, 1909).—Ekehorn describes an operation for prolapse of the rectum which consists in attaching the posterior wall of the rectum to the sacrum by means of a transverse suture. No incision of the skin or rectum is necessary. The prolapsed rectum is first replaced and held in position by the forefinger of the left hand. A moderate-sized needle in a handle is then passed through the skin at one side of the extremity of the sacrum, and is pushed through the soft tissues until it pierces the rectum. It is then guided by the finger of the left hand to the anal orifice, where it is threaded with a piece of stout silk, one end of which is withdrawn with the needle. The other end of the ligature is similarly brought out at the same level on the other side of the sacrum and the two ends are tied together over the skin. No dressings are required, and the patient need not be kept in bed. After a fortnight the suture is removed. In the writer's experience no rise of temperature follows, and no inconvenience is caused by the presence of the suture after the pain of the operation has passed off.

T. R. WHIPHAM.

Correspondence.

A CASE OF CYCLIC OR RECURRENT VOMITING ASSOCIATED WITH HYPERTROPHIC STENOSIS OF THE PYLORUS.

To the Editor of THE BRITISH JOURNAL OF CHILDREN'S DISEASES.

DEAR SIR,—With reference to Mr. T. C. Dent's letter in your last issue, I should like to point out that the question of hypertrophic stenosis of the pylorus concerned me only in so far as in my case it seemed to throw light on the pathology of recurrent or cyclic vomiting of children, a condition the nature of which has given rise to considerable discussion.

To describe hypertrophic stenosis of the pylorus as "an affection of young infants" is, of course, hardly accurate, as the statement is open to the inference that the condition is confined to young infants, which is not the case, as my own case and others clearly show, but I presume that Mr. Dent will agree with me that it is much more common in infants than in older children, if only for the reason that many infants die of it, and further, it has rarely been described in older children.

I do not understand why Mr. Dent states that I "assume . . . that the condition does not persist," as I think I made it clear in the description

of my case that the child had been liable to the attacks from birth, and I did not doubt that the hypertrophic stenosis was the cause throughout. Further, in conjecturing that the condition might have been overlooked at autopsies of older children, I intended to imply the possibility of its persistence.

The object of my paper was to report a case presenting the typical symptoms of so-called cyclic vomiting, in which the presence of hypertrophic stenosis of the pylorus seemed to throw a new light on the pathology of, at least, some cases of this condition. It is a very generally accepted opinion that hypertrophied muscle-fibre, especially of the unstriated variety, is prone to spasm, and further we know that both the pyloric and cardiac ends of the stomach are liable to spasm. Recurring attacks of spasm would convert an incomplete into a complete obstruction of the pylorus, and my contention was that the other symptoms of vomiting and acute starvation with the presence of the acetone bodies in the breath and urine would follow automatically.

Mr. Dent, however, is an opponent of the view that spasm enters into the pathology of hypertrophic stenosis. I was not concerned in my paper with the pathology of the production of hypertrophic stenosis, and quoted various views as to the existence of muscular spasm in that condition merely to show that, given the existence of hypertrophic stenosis, the possibility of the occurrence of attacks of muscular spasm cannot be dismissed lightly.

As regards the possibility that folds of mucous membrane may have been concerned in the production of the attacks of pyloric obstruction in my case, I can only say that there was no evidence of any excess of mucous folds at the autopsy, though I can conceive that such might produce obstruction, but so also would spasm.

Mr. Dent adds that "I cannot but think that this" (*i. e.* the presence of mucous folds in the pyloric canal) "is the chief explanation in such a case as Dr. Russell has described." It would seem, therefore, that he adopts my views, at any rate to the extent of agreeing that recurring attacks of complete pyloric obstruction did occur in my case. This was my main contention.

As the symptoms presented by my case were those characteristic of cyclic vomiting I regret his remark that "with the pathological chemistry of the case I am not concerned at present," for, as above stated, it seems to me that the vomiting, wasting, and chemical changes were directly referable to the attacks of mechanical obstruction of the pylorus.

The question of operation was, of course, considered, and I am of opinion that timely operation would probably have saved the child's life. It has to be remembered, however, firstly that the symptoms were those of cyclic vomiting in which the possibility of mechanical obstruction of the pylorus has not, so far as I am aware, been brought forward before, the current views invoking some toxic cause. The possibility of obstruction of the pylorus did, however, occur to me. In the second place, despite the boy's emaciation, he did not appear to be in danger of dying. Recovery from the first attack was complete, and in the second attack severe broncho-pneumonia, very possibly due to the vomitus invading the bronchi, precipitated a fatal issue on the sixth day of the attack. In any severe and prolonged attack of cyclic vomiting the question of operation would deserve serious consideration.

I am,

Yours faithfully,

A. E. RUSSELL.

April the 14th, 1910.